

50	55	60
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Leu Glu Ser Thr Leu Asp	Asn Ser Cys Gln Gly Ala	Gln Met Asp Asn
85	90	95
Lys Ser Glu Val Gln Leu	Trp Leu Leu Lys Arg Ile	Gln Val Pro Ile
100	105	110
Glu Asp Ile Leu Pro Ser	Lys Glu Glu Lys Ser Lys	Thr Pro Pro Met
115	120	125
Phe Leu Cys Ile Lys Val	Gly Lys Pro Met Arg Lys	Ser Phe Ala Thr
130	135	140
His Thr Ala Ala Met Val	Gln Gln Tyr Gly Lys Arg	Arg Lys Gln Pro
145	150	155
Glu Tyr Trp Phe Ala Val	Pro Arg Glu Arg Val Asp	His Leu Tyr Thr
165	170	175
Phe Phe Val Gln Trp Ser	Pro Asp Val Tyr Gly Lys	Asp Ala Lys Glu
180	185	190
Gln Gly Phe Val Val Val	Glu Lys Glu Glu Leu Asn	Met Ile Asp Asn
195	200	205
Phe Phe Ser Glu Pro Thr	Thr Lys Ser Trp Glu Ile	Ile Thr Val Glu
210	215	220
Glu Ala Lys Arg Arg Lys	Ser Thr Cys Ser Tyr Tyr	Glu Asp Glu Asp
225	230	235
Glu Glu Val Leu Pro Val	Leu Arg Pro Pro Arg Ala	Phe Trp Glu Asn
245	250	255
Lys Pro Leu Asn Arg Trp	Ala Arg Pro Phe Pro Ala	Arg Val Gln Gly
260	265	270
Tyr Pro Trp Arg Leu Ala	Tyr Ser Thr Leu Glu His	Gly Thr Ser Leu
275	280	285
Lys Thr Leu Tyr Arg Lys	Ser Ala Ser Leu Asp Ser	Pro Val Leu Leu
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Val Ile Lys		
305		

<210> 2763

<211> 2210

<212> DNA

<213> Homo sapiens

<400> 2763

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 360
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 420

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480
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2040

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<210> 2764

<211> 423

<212> PRT

<213> Homo sapiens

<400> 2764

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			20					25					30		
Val	Ala	Ser	Gly	Pro	Val	Val	Gly	Gly	Arg	Lys	Lys	Val	Arg	Gly	Pro
		35					40					45			
Glu	Gln	Ile	Lys	Gln	Glu	Val	Glu	Ser	Glu	Glu	Glu	Lys	Pro	Asp	Arg
	50					55					60				
Met	Asp	Ile	Asp	Ser	Glu	Asp	Thr	Asp	Ser	Asn	Thr	Ser	Leu	Gln	Thr
65					70					75				80	
Arg	Ala	Arg	Glu	Lys	Arg	Lys	Pro	Gln	Leu	Glu	Lys	Asp	Thr	Lys	Pro
			85						90					95	
Lys	Glu	Pro	Arg	Tyr	Thr	Pro	Val	Ser	Ile	Tyr	Glu	Glu	Lys	Leu	Leu
		100					105						110		
Leu	Lys	Arg	Leu	Glu	Ala	Cys	Pro	Gly	Ala	Val	Ala	Met	Thr	Pro	Glu
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Ala	Arg	Arg	Leu	Lys	Arg	Lys	Leu	Ile	Val	Arg	Gln	Ala	Lys	Arg	Asp
	130					135					140				
Arg	Gly	Leu	Pro	Leu	Phe	Asp	Leu	Asp	Gln	Val	Val	Asn	Ala	Ala	Leu
145					150					155					160
Leu	Leu	Val	Asp	Gly	Ile	Tyr	Gly	Ala	Lys	Glu	Gly	Gly	Ile	Ser	Arg
			165						170					175	
Leu	Pro	Ala	Gly	Gln	Ala	Thr	Tyr	Arg	Thr	Thr	Cys	Gln	Asp	Phe	Arg
		180						185					190		
Ile	Leu	Asp	Arg	Tyr	Gln	Thr	Ser	Leu	Pro	Ser	Arg	Lys	Gly	Phe	Arg
	195					200						205			
His	Gln	Thr	Thr	Lys	Phe	Leu	Tyr	Arg	Leu	Val	Gly	Ser	Glu	Asp	Met
	210					215					220				
Ala	Val	Asp	Gln	Ser	Ile	Val	Ser	Pro	Tyr	Thr	Ser	Arg	Ile	Leu	Lys
225					230					235					240
Pro	Tyr	Ile	Arg	Arg	Asp	Tyr	Glu	Thr	Lys	Pro	Pro	Lys	Leu	Gln	Leu
			245						250					255	
Leu	Ser	Gln	Ile	Arg	Ser	His	Leu	His	Arg	Ser	Asp	Pro	His	Trp	Thr
		260					265						270		
Pro	Glu	Pro	Asp	Ala	Pro	Leu	Asp	Tyr	Cys	Tyr	Val	Arg	Pro	Asn	His
	275					280						285			
Ile	Pro	Thr	Ile	Asn	Ser	Met	Cys	Gln	Glu	Phe	Phe	Trp	Pro	Gly	Ile
	290					295						300			
Asp	Leu	Ser	Glu	Cys	Leu	Gln	Tyr	Pro	Asp	Phe	Ser	Val	Val	Val	Leu
305					310					315					320
Tyr	Lys	Lys	Val	Ile	Ile	Ala	Phe	Gly	Phe	Met	Val	Pro	Asp	Val	Lys

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                325                330                335
Tyr Asn Glu Ala Tyr Ile Ser Phe Leu Phe Val His Pro Glu Trp Arg
                340                345                350
Arg Ala Gly Ile Ala Thr Phe Met Ile Tyr His Leu Ile Gln Thr Cys
                355                360                365
Met Gly Lys Asp Val Thr Leu His Val Ser Ala Ser Asn Pro Ala Met
                370                375                380
Leu Leu Tyr Gln Lys Phe Gly Phe Lys Thr Glu Glu Tyr Val Leu Asp
385                390                395                400
Phe Tyr Asp Lys Tyr Tyr Pro Leu Glu Ser Thr Glu Cys Lys His Ala
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Phe Phe Leu Arg Leu Arg Arg
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<210> 2765
 <211> 582
 <212> DNA
 <213> Homo sapiens

<400> 2765
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 420
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<210> 2766
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 2766
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 20 25 30
 Ala Arg Ser Leu Cys Ser Ala Gly Thr Gln Pro Ala Pro Ser Thr Thr
 35 40 45
 Ser Leu Pro Ser Trp Arg Ser Ala Ala Pro Leu Ala Trp Pro Leu Gln

50		55		60
Leu Ser Gly Gln Trp	Trp Ser Ala Gly Ala Cys	Phe Leu Asp Leu Pro		
65	70	75	80	
Ser Leu Ala Leu Cys	Trp Pro Gly Asp Ser	Gly Asp Ala Glu Trp	Pro	
	85	90	95	
Glu Ala Gly Ser				
100				

<210> 2767

<211> 1202

<212> DNA

<213> Homo sapiens

<400> 2767

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180
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240
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360
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420
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gcgtcctctg acagctcgcc cgtggcttct ccttccagtc ccaaaagaaa tttcttcagc
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1080
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1202

<210> 2768
<211> 282
<212> PRT
<213> Homo sapiens

<400> 2768
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Ser Leu Ala Gln Pro Asp Arg Arg Tyr Ser Glu Pro Ser Met Pro Ser
35 40 45
Ser Gln Glu Cys Leu Glu Ser Arg Val Thr Asn Gln Thr Leu Thr Lys
50 55 60
Ser Glu Gly Asp Phe Pro Val Pro Arg Val Gly Ser Arg Leu Glu Ser
65 70 75 80
Glu Glu Ala Glu Asp Pro Phe Pro Glu Glu Val Phe Pro Ala Val Gln
85 90 95
Gly Lys Thr Lys Arg Pro Val Asp Leu Lys Ile Lys Asn Leu Ala Pro
100 105 110
Gly Ser Val Leu Pro Arg Ala Leu Val Leu Lys Ala Phe Ser Ser Ser
115 120 125
Ser Leu Asp Ala Ser Ser Asp Ser Ser Pro Val Ala Ser Pro Ser Ser
130 135 140
Pro Lys Arg Asn Phe Phe Ser Arg His Gln Ser Phe Thr Thr Lys Thr
145 150 155 160
Glu Lys Gly Lys Pro Ser Arg Glu Ile Lys Lys His Ser Met Ser Phe
165 170 175
Thr Phe Ala Pro His Lys Lys Val Leu Thr Lys Asn Leu Ser Ala Gly
180 185 190
Ser Gly Lys Ser Gln Asp Phe Thr Arg Asp His Val Pro Arg Gly Val
195 200 205
Arg Lys Glu Ser Gln Leu Ala Gly Arg Ile Val Gln Glu Asn Gly Cys
210 215 220
Glu Thr His Asn Gln Thr Ala Arg Gly Phe Cys Leu Arg Pro His Ala
225 230 235 240
Leu Ser Val Asp Asp Val Phe Gln Gly Ala Asp Trp Glu Arg Pro Gly
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Ser Pro Pro Ser Tyr Glu Glu Ala Met Gln Gly Pro Ala Ala Arg Leu
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Val Ala Ser Gln Gln Phe Gln Phe Leu Ala
275 280

<210> 2769
<211> 1286
<212> DNA
<213> Homo sapiens

<400> 2769
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<210> 2770

<211> 228

<212> PRT

<213> Homo sapiens

<400> 2770

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		20						25				30			
Asn	Arg	Ile	Arg	Val	Arg	Gln	Asp	Leu	Ala	Ser	Leu	Pro	Ala	Glu	Leu

35 40 45
 Ile Asn Gln Ile Gly Asn Arg Cys His Pro Lys Leu Tyr Asp Glu Gly
 50 55 60
 Asp Pro Ser Glu Lys Leu Glu Leu Val Thr Gly Thr Asn Val Tyr Ile
 65 70 75 80
 Thr Arg Ala Gln Leu Met Asn Cys His Val Ser Ala Gly Thr Arg His
 85 90 95
 Lys Val Leu Leu Arg Arg Leu Leu Ala Ser Phe Phe Asp Arg Asn Thr
 100 105 110
 Leu Ala Asn Ser Cys Gly Thr Gly Ile Arg Ser Ser Thr Asn Asp Pro
 115 120 125
 Arg Arg Lys Pro Leu Asp Ser Arg Val Leu His Ala Val Lys Tyr Tyr
 130 135 140
 Cys Gln Asn Phe Ala Pro Asn Phe Lys Glu Ser Glu Met Asn Ala Ile
 145 150 155 160
 Ala Ala Asp Met Cys Thr Asn Ala Arg Arg Val Val Arg Lys Ser Trp
 165 170 175
 Met Pro Lys Val Lys Val Leu Lys Ala Glu Asp Asp Ala Tyr Thr Thr
 180 185 190
 Phe Ile Ser Glu Thr Gly Lys Ile Glu Pro Asp Met Met Gly Val Glu
 195 200 205
 His Gly Phe Glu Thr Ala Ser His Glu Gly Glu Ala Gly Pro Ile Ala
 210 215 220
 Glu Ala Leu Gln
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<210> 2771

<211> 1668

<212> DNA

<213> Homo sapiens

<400> 2771

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<210> 2772

<211> 258

<212> PRT

<213> Homo sapiens

<400> 2772

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			20					25					30		
Thr	Met	Ser	Thr	Val	Val	Glu	Leu	Asn	Val	Gly	Gly	Glu	Phe	His	Thr
			35				40					45			
Thr	Thr	Leu	Gly	Thr	Leu	Arg	Lys	Phe	Pro	Gly	Ser	Lys	Leu	Ala	Glu
		50				55				60					
Met	Phe	Ser	Ser	Leu	Ala	Lys	Ala	Ser	Thr	Asp	Ala	Glu	Gly	Arg	Phe
65				70					75					80	
Phe	Ile	Asp	Arg	Pro	Ser	Thr	Tyr	Phe	Arg	Pro	Ile	Leu	Asp	Tyr	Leu
			85				90						95		
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<210> 2774
<211> 157
<212> PRT
<213> Homo sapiens
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<400> 2774

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 Glu Asp Ala Glu Glu Ser Leu Glu Glu Glu Glu Ala Leu Asp Pro Leu
 35 40 45
 Gly Ile Met Arg Ser Lys Lys Pro Lys Lys His Pro Lys Val Ala Val
 50 55 60
 Lys Ala Lys Pro Ser Pro Arg Leu Thr Ile Phe Asp Glu Glu Val Asp
 65 70 75 80
 Pro Asp Glu Gly Leu Phe Gly Pro Gly Arg Lys Leu Ser Pro Gln Asp
 85 90 95
 Pro Ser Glu Asp Val Ser Ser Met Asp Pro Leu Lys Leu Phe Asp Asp
 100 105 110
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<210> 2778

<211> 1146

<212> PRT

<213> Homo sapiens

<400> 2778

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Pro Ala Thr Met Gln Pro Ile Pro Glu Ala His Ser Leu Tyr Val Thr
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Leu Ile Leu Ser Asp Ser Val Met Asn Ile Phe Lys Asp Arg Asn Phe
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Asp Ser Cys Cys Ile Cys Ala Cys Asn Met Asn Ile Lys Gly Ala Asp
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Val Gly Leu Tyr Ile Pro Asp Ser Ser Asn Glu Asp Gln Tyr Arg Cys
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Thr Cys Gly Phe Ser Ala Ile Met Asn Arg Lys Leu Gly Tyr Asn Ser
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Gly Leu Phe Leu Glu Asp Glu Leu Asp Ile Phe Gly Lys Asn Ser Asp
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Ile Gly Gln Ala Ala Glu Arg Arg Leu Met Met Cys Gln Ser Thr Phe
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Leu Pro Gln Val Glu Gly Thr Lys Lys Pro Gln Glu Pro Pro Ile Ser
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Leu Leu Leu Leu Leu Gln Asn Gln His Thr Gln Pro Phe Ala Ser Leu
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Asn Phe Leu Asp Tyr Ile Ser Ser Asn Asn Arg Gln Thr Leu Pro Cys
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Val Ser Trp Ser Tyr Asp Arg Val Gln Ala Asp Asn Asn Asp Tyr Trp
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Thr Glu Cys Phe Asn Ala Leu Glu Gln Gly Arg Gln Tyr Val Asp Asn
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Pro Thr Gly Gly Lys Val Asp Glu Ala Leu Val Arg Ser Ala Thr Val
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His Ser Trp Pro His Ser Asn Val Leu Asp Ile Ser Met Leu Ser Ser
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Gln Asp Val Val Arg Met Leu Leu Ser Leu Gln Pro Phe Leu Gln Asp
          260          265          270
Ala Ile Gln Lys Lys Arg Thr Gly Arg Thr Trp Glu Asn Ile Gln His
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Val Gln Gly Pro Leu Thr Trp Gln Gln Phe His Lys Met Ala Gly Arg
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Gly Thr Tyr Gly Ser Glu Glu Ser Pro Glu Pro Leu Pro Ile Pro Thr
305          310          315          320
Leu Leu Val Gly Tyr Asp Lys Asp Phe Leu Thr Ile Ser Pro Phe Ser
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Leu Pro Phe Trp Glu Arg Leu Leu Leu Asp Pro Tyr Gly Gly His Arg
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Asp Val Ala Tyr Ile Val Val Cys Pro Glu Asn Glu Ala Leu Leu Glu
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Gly Ala Lys Thr Phe Phe Arg Asp Leu Ser Ala Val Tyr Glu Met Cys
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Arg Leu Gly Gln His Lys Pro Ile Cys Lys Val Leu Arg Asp Gly Ile

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Ala Phe Asn Pro	Thr Ser Asn Ser Ser Ser Thr	Asn Pro Ala Ala	Ser			
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His Pro Pro Ala	Val Val Ile Tyr Met Val Asp	Pro Phe Thr Tyr	Ala			
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Ala Glu Glu Asp	Ser Thr Ser Gly Asn Phe Trp	Leu Leu Ser Leu	Met			
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Arg Cys Tyr Thr	Glu Met Leu Asp Asn Leu Pro	Glu His Met Arg	Asn			
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Ser Phe Ile Leu	Gln Ile Val Pro Cys Gln Tyr	Met Leu Gln Thr	Met			
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Lys Asp Glu Gln	Val Phe Tyr Ile Gln Tyr Leu	Lys Ser Met Ala	Phe			
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Ser Val Tyr Cys	Gln Cys Arg Arg Pro Leu Pro	Thr Gln Ile His	Ile			
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Lys Ser Leu Thr	Gly Phe Gly Pro Ala Ala Ser	Ile Glu Met Thr	Leu			
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Lys Asn Pro Glu	Arg Pro Ser Pro Ile Gln Leu	Tyr Ser Pro Pro	Phe			
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Ile Leu Ala Pro	Ile Lys Asp Lys Gln Thr Glu	Leu Gly Glu Thr	Phe			
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Gly Glu Ala Ser	Gln Lys Tyr Asn Val Leu Phe	Val Gly Tyr Cys	Leu			
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Ser His Asp Gln	Arg Trp Leu Leu Ala Ser Cys	Thr Asp Leu His	Gly			
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Glu Leu Leu Glu	Thr Cys Val Val Asn Ile Ala	Leu Pro Asn Arg	Ser			
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Glu Trp Cys Ile	Gly Ile Val Gln Met Thr Ser	Leu Pro Trp Arg	Val			

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      850      855      860
Lys Asp Val Cys Arg Met Cys Gly Ile Ser Ala Ala Asp Ser Pro Ser
865      870      875      880
Ile Leu Ser Ala Cys Leu Val Ala Met Glu Pro Gln Gly Ser Phe Val
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Val Met Pro Asp Ala Val Thr Met Gly Ser Val Phe Gly Arg Ser Thr
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Ala Leu Asn Met Gln Ser Ser Gln Leu Asn Thr Pro Gln Asp Ala Ser
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Cys Thr His Ile Leu Val Phe Pro Thr Ser Ser Thr Ile Gln Val Ala
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Pro Ala Asn Tyr Pro Asn Glu Asp Gly Phe Ser Pro Asn Asn Asp Asp
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      965      970      975
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Pro Ser Pro Gly Ser Pro Ser Gly Ile Gly Val Gly Ser His Phe Gln
      995      1000      1005
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Gln Asn Gln Cys Pro Leu Phe Leu Lys Ala Ser Leu His His His Ile
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Ser Val Ala Gln Thr Asp Glu Leu Leu Pro Ala Arg Asn Ser Gln Arg
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Val Pro His Pro Leu Asp Ser Lys Thr Thr Ser Asp Val Leu Arg Phe
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Thr Gln Asp Arg Thr Ser Cys Leu Pro Val His Phe Val Val Leu Thr
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<210> 2779

<211> 2461

<212> DNA

<213> Homo sapiens

<400> 2779

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Asp	Arg	Gly	Asp	Ala	Ala	Ala	Thr	Asp	Asp	Pro	Ala	Ala	Arg	Phe	Gln	
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Phe	Val	Gln	Lys	Thr	Asp	Glu	Ser	Gly	Pro	His	Ser	His	Arg	Leu	Tyr	
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Pro	Ala	Asp	Pro	Ala	Phe	Phe	Ser	Phe	Ile	Asn	Asn	Ser	Asp	Leu	Trp		
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Gln	Gly	Leu	Ser	Asn	Val	Leu	Asp	Asp	Pro	Lys	Ser	Ala	Gly	Val	Ala		
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Val	Gln	Pro	Phe	Ser	Ser	Leu	Phe	Pro	Lys	Val	Glu	Tyr	Ile	Ala	Arg		
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			580					585							590		
Phe	Gln	Gly	Thr	Lys	Asp	Thr	Pro	Leu	Glu	His	His	Leu	Tyr	Val	Val		
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Ser	Tyr	Glu	Ala	Ala	Gly	Glu	Ile	Val	Arg	Leu	Thr	Thr	Pro	Gly	Phe		

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	645	650
Gly Pro Asp Asp Asp Pro Leu His Lys Gln Pro Arg Phe Trp Ala Ser		655
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Met Met Glu Ala Ala Ser Cys Pro Pro Asp Tyr Val Pro Pro Glu Ile		670
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Phe His Phe His Thr Arg Ser Asp Val Arg Leu Tyr Gly Met Ile Tyr		685
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<211> 1268

<212> DNA

<213> Homo sapiens

<400> 2781

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 Pro Thr Leu Glu Ile Asp Ile Glu Gly Gln Leu Lys Arg Leu Lys Gly
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<212> DNA
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<210> 2784

<211> 361

<212> PRT

<213> Homo sapiens

<400> 2784

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Glu	Val	Leu	Gly	Ile	Lys	Arg	Asp	Lys	Ser	Asp	Ser	Pro	Ala	Ile	Gln
			20					25					30		
Leu	Arg	Leu	Lys	Glu	Pro	Met	Asp	Val	Asp	Val	Glu	Asp	Tyr	Tyr	Pro
			35				40					45			
Ala	Phe	Leu	Asp	Met	Val	Arg	Ser	Leu	Leu	Asp	Gly	Asn	Ile	Asp	Ser
	50				55					60					
Ser	Gln	Tyr	Glu	Asp	Ser	Leu	Arg	Glu	Met	Phe	Thr	Ile	His	Ala	Tyr
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<210> 2785
<211> 492
<212> DNA
<213> Homo sapiens
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<210> 2786
 <211> 155
 <212> PRT
 <213> Homo sapiens

<400> 2786
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 35 40 45
 Ile Leu Asn Val Arg Arg Thr Cys Arg Lys Leu Ala Ala Leu Cys Leu
 50 55 60
 Asp Lys Ser Leu Ile His Thr Val Leu Leu Gln Lys Asp Tyr Gln Ala
 65 70 75 80
 Ser Glu Asp Lys Val Arg Gln Leu Val Lys Glu Ile Gly Arg Glu Ile
 85 90 95
 Gln Gln Leu Ser Met Ala Gly Cys Tyr Trp Leu Pro Gly Ser Thr Val
 100 105 110
 Glu His Val Ala Arg Cys Pro Gln Pro Gly Glu Gly Glu Pro Leu Gly
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 Ala Pro Ala Leu Ala Gly His Arg Arg Glu Pro
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<210> 2787
 <211> 299
 <212> DNA
 <213> Homo sapiens

<400> 2787
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<210> 2788
 <211> 95
 <212> PRT

<213> Homo sapiens

<400> 2788

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Met Trp Gly Glu Glu Pro Tyr Ser Asp Ile Ser Val Ala Lys Thr Arg
          20           25           30
Ala Gly His Ala Thr Met His Arg His Gly Ser Ile Leu Leu Val Gly
          35           40           45
Gly Ser His His Leu Leu Cys Pro Ala Leu Cys Trp Val Leu Leu Gln
          50           55           60
Val Leu Leu His Pro Ala Leu Glu Thr Ile Leu Trp Gly Ile Asp Ser
65           70           75           80
Glu Glu Ile Thr Asp Gly Arg Asp Phe Leu Pro Gln Leu Thr Gln
          85           90           95

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<210> 2789

<211> 492

<212> DNA

<213> Homo sapiens

<400> 2789

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gcgaggccag gctgtgcagt ggggccagca ccagctgcag cttctcctcc agcagggtcca
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240
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cccagggaga ggcagagcca gaagactcag gccagggcct ctgccacccc cgctgcctgc
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<210> 2790

<211> 141

<212> PRT

<213> Homo sapiens

<400> 2790

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Arg Lys Ser Ala Arg Ser Gly Ser Arg Cys Gly Arg Ala Ala Gly Arg
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Ser Ala Pro Gly Gly Cys Arg Gly Pro Gly Ala His Ala Pro Val Pro
          20           25           30
Ala Arg Pro Gly Cys Ala Val Gly Pro Ala Pro Ala Ala Ala Ser Pro
          35           40           45
Pro Ala Gly Pro Pro Trp Thr Ala Ala Ser Ala Leu Leu Pro Ser Leu

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50		55		60
His Cys Pro Leu Leu Arg	Ala Glu Pro Gly Ala Gly Ser Arg Pro Ala			
65	70	75	80	
Gly Ser Pro Pro Thr Pro	Pro Gly Leu Pro Pro Val Pro Arg Glu Arg			
	85	90	95	
Gln Ser Gln Lys Thr Gln	Ala Gln Ala Ser Ala Thr Pro Ala Ala Cys			
	100	105	110	
Leu Ala Leu Ala Arg Gly	Leu Arg Leu Cys Arg Leu Ser Thr Ser Gly			
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Arg Val Ala Leu Arg Arg	Gly Ser Gly Ser Arg Pro Arg			
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<210> 2791

<211> 1271

<212> DNA

<213> Homo sapiens

<400> 2791

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1080

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 1260
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 1271

<210> 2792
 <211> 123
 <212> PRT
 <213> Homo sapiens

<400> 2792
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 Phe Thr Phe Thr Ile Pro Asp Val Glu Asp Ser Ser Gln Arg Pro Asp
 20 25 30
 Gln Gly Pro Gln Arg Pro Pro Pro Glu Gly Leu Leu Pro Arg Pro Pro
 35 40 45
 Gly Asp Ser Gly Asn Gln Asp Asp Gly Pro Gln Gln Arg Pro Pro Lys
 50 55 60
 Pro Gly Gly His His Arg His Pro Pro Pro Pro Phe Gln Asn Gln
 65 70 75 80
 Gln Arg Pro Pro Gln Arg Gly His Arg Gln Leu Ser Leu Pro Arg Phe
 85 90 95
 Pro Ser Val Ser Leu Gln Glu Ala Ser Ser Phe Phe Arg Arg Asp Arg
 100 105 110
 Pro Ala Arg His Pro Gln Glu Gln Pro Leu Trp
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<210> 2793
 <211> 847
 <212> DNA
 <213> Homo sapiens

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<210> 2794

<211> 139

<212> PRT

<213> Homo sapiens

<400> 2794

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			20					25					30		
Gln	Val	Ile	Leu	Val	Gln	Val	Asn	Pro	Gly	Glu	Ala	Phe	Thr	Ile	Arg
			35				40					45			
Arg	Glu	Asp	Gly	Gln	Phe	Gln	Cys	Ile	Thr	Gly	Pro	Ala	Gln	Val	Pro
	50					55					60				
Met	Met	Ser	Pro	Asn	Gly	Ser	Val	Pro	Pro	Ile	Tyr	Val	Pro	Pro	Gly
65				70						75				80	
Tyr	Ala	Pro	Gln	Val	Ile	Glu	Asp	Asn	Gly	Val	Arg	Arg	Val	Val	Val
			85						90				95		
Val	Pro	Gln	Ala	Pro	Glu	Phe	His	Pro	Gly	Ser	His	Thr	Val	Leu	His
			100					105					110		
Arg	Ser	Pro	His	Pro	Pro	Leu	Pro	Gly	Phe	Ile	Pro	Val	Pro	Thr	Met
		115				120						125			
Met	Pro	Pro	His	His	Val	Ile	Cys	Thr	His	Pro					
		130				135									

<210> 2795

<211> 1022

<212> DNA

<213> Homo sapiens

<400> 2795

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 1022

<210> 2796
 <211> 56
 <212> PRT
 <213> Homo sapiens

<400> 2796
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 Gly Glu Glu Ala Glu Val Leu Glu Pro Arg Gly Ser Ser Ser Gly Cys
 35 40 45
 Ser Ala Pro Leu Gly Ala Val Val
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<210> 2797
 <211> 475
 <212> DNA
 <213> Homo sapiens

<400> 2797
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<212> PRT
<213> Homo sapiens

<400> 2798
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Glu Ala Val Ser Asn Ile His Asn Leu Asn Ser Ile Ser Glu Ser Pro
35 40 45
His Glu Arg Met His Pro Tyr Ile Glu Leu Ala Trp Gly Phe Ser Thr
50 55 60
Val Leu Gly Ile Leu Leu Phe Leu Ala Glu Val Val Leu Leu Cys Trp
65 70 75 80
Ile Lys Phe Leu Pro Val Asp Ala Arg Arg Gln Pro Gly Pro Pro Pro
85 90 95
Gly Pro Gly Ser His Thr Gly Trp Gln Ala Ala Leu Val Ser Thr Ile
100 105 110
Ile Met Val Pro Val Gly Leu Ile Phe Val Val Phe Thr Ile His Phe
115 120 125
Tyr Arg Ser Leu Val Arg His Lys Thr Glu Arg His Asn Arg Glu Ile
130 135 140
Glu Glu Leu His Lys Leu Lys Val Gln Leu Asp Gly His Glu
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<210> 2799
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<212> DNA
<213> Homo sapiens

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 acatgagaca tactgacaga atctgtaagc taataaaatg taagaaaagg ttaaaaaaag
 2760
 aataggtaaa ttgacaagaa gtatttattg tttttccata ttgctttatt gccttccttg
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 2872

<210> 2800

<211> 294

<212> PRT

<213> Homo sapiens

<400> 2800

Met	Ser	Pro	Phe	Leu	Phe	Cys	Cys	Met	Met	Val	Gly	Gly	Gly	Glu	Asp
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Thr	Phe	Met	Ala	Ser	Pro	Tyr	Lys	Pro	Glu	Ile	Ser	Arg	Glu	Gln	Ala
			20					25					30		
Ile	Ala	Leu	Leu	Lys	Asp	Gln	Glu	Pro	Gly	Ala	Phe	Ile	Ile	Arg	Asp
			35					40					45		
Ser	His	Ser	Phe	Arg	Gly	Ala	Tyr	Gly	Leu	Ala	Met	Lys	Val	Ser	Ser
			50				55				60				
Pro	Pro	Pro	Thr	Ile	Met	Gln	Gln	Asn	Lys	Lys	Gly	Asp	Met	Thr	His
					70					75				80	
Glu	Leu	Val	Arg	His	Phe	Leu	Ile	Glu	Thr	Gly	Pro	Arg	Gly	Val	Lys
				85						90				95	
Leu	Lys	Gly	Cys	Pro	Asn	Glu	Pro	Asn	Phe	Gly	Ser	Leu	Ser	Ala	Leu

100 105 110
 Val Tyr Gln His Ser Ile Ile Pro Leu Ala Leu Pro Cys Lys Leu Val
 115 120 125
 Ile Pro Asn Arg Asp Pro Thr Asp Glu Ser Lys Asp Ser Ser Gly Pro
 130 135 140
 Ala Asn Ser Thr Ala Asp Leu Leu Lys Gln Gly Ala Ala Cys Asn Val
 145 150 155 160
 Leu Phe Ile Asn Ser Val Asp Met Glu Ser Leu Thr Gly Pro Gln Ala
 165 170 175
 Ile Ser Lys Ala Thr Ser Glu Thr Leu Ala Ala Asp Pro Thr Pro Ala
 180 185 190
 Ala Thr Ile Val His Phe Lys Val Ser Ala Gln Gly Ile Thr Leu Thr
 195 200 205
 Asp Asn Gln Arg Lys Leu Phe Phe Arg Arg His Tyr Pro Leu Asn Thr
 210 215 220
 Val Thr Phe Cys Asp Leu Asp Pro Gln Glu Arg Lys Trp Met Lys Thr
 225 230 235 240
 Glu Gly Gly Ala Pro Ala Lys Leu Phe Gly Phe Val Ala Arg Lys Gln
 245 250 255
 Gly Ser Thr Thr Asp Asn Ala Cys His Leu Phe Ala Glu Leu Asp Pro
 260 265 270
 Asn Gln Pro Ala Ser Ala Ile Val Asn Phe Val Ser Lys Val Met Leu
 275 280 285
 Asn Ala Gly Gln Lys Arg
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<210> 2801
 <211> 549
 <212> DNA
 <213> Homo sapiens

<400> 2801
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 120
 ttcagcacac cagtggggca gtgcctcgaa aaggcaacag atggctccct gcaaagtgag
 180
 gattggacgt tgaatatgga gatctgtgac atcatcaatg agacggagga agggccaaag
 240
 gatgccattc gagccctgaa gaagcggctc aacgggaacc ggaactacag agaggtgatg
 300
 ctggcattaa cagtgtgga gacatgtgtg aagaactgtg gccaccgctt ccacatcctt
 360
 gtggccaacc gagatttcac cgacagtgtt ctggtcaaaa ttatatctcc caagaacaac
 420
 cctcccacca ttgtacagga caaagtgctt gctctgatcc aggcattggg tgatgccttt
 480
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 540
 gttgaattc
 549

<210> 2802

<211> 151

<212> PRT

<213> Homo sapiens

<400> 2802

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Met Glu Phe Leu Leu Gly Asn Pro Phe Ser Thr Pro Val Gly Gln Cys
 1             5             10             15
Leu Glu Lys Ala Thr Asp Gly Ser Leu Gln Ser Glu Asp Trp Thr Leu
      20             25             30
Asn Met Glu Ile Cys Asp Ile Ile Asn Glu Thr Glu Glu Gly Pro Lys
      35             40             45
Asp Ala Ile Arg Ala Leu Lys Lys Arg Leu Asn Gly Asn Arg Asn Tyr
      50             55             60
Arg Glu Val Met Leu Ala Leu Thr Val Leu Glu Thr Cys Val Lys Asn
65             70             75             80
Cys Gly His Arg Phe His Ile Leu Val Ala Asn Arg Asp Phe Ile Asp
      85             90             95
Ser Val Leu Val Lys Ile Ile Ser Pro Lys Asn Asn Pro Pro Thr Ile
      100            105            110
Val Gln Asp Lys Val Leu Ala Leu Ile Gln Ala Trp Ala Asp Ala Phe
      115            120            125
Arg Ser Ser Pro Asp Leu Thr Gly Val Val His Ile Tyr Glu Glu Leu
      130            135            140
Lys Arg Lys Gly Val Glu Phe
145             150

```

<210> 2803

<211> 459

<212> DNA

<213> Homo sapiens

<400> 2803

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120
ccgccagccg tagggtgtgt gctgtccggg ctcacgggga cctgtctcc gagtcgttcg
180
tgcagcgtgt gtaccagccc ttcctacca cctgcgacgg gcaccgggccc tgcagcacct
240
accgcaatat gccagccgcc atgccggaac ggaggagct gtgtccagcc tggccgctgc
300
cgctgccctg caggatggcg gggtgacact tgccagtcag atgtggacna gtgcaatgaa
360
ggaagaagtg cagaggctgc agtccagggt ggacctgctg gaggagaagc tgcagctggt
420
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459

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<210> 2804

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2804

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Xaa Met Ala Thr Pro Gly Leu Gln Gln His Gln Gln Pro Pro Gly Pro
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Gly Arg His Arg Trp Pro Pro Pro Pro Gly Gly Ala Ala Pro Ala Pro
          20           25           30
Val Arg Gly Met Thr Asp Ser Pro Pro Pro Ala Val Gly Cys Val Leu
          35           40           45
Ser Gly Leu Thr Gly Thr Leu Ser Pro Ser Arg Ser Cys Ser Val Cys
          50           55           60
Thr Ser Pro Ser Ser Pro Pro Ala Thr Gly Thr Gly Pro Ala Ala Pro
65           70           75           80
Thr Ala Ile Cys Gln Pro Pro Cys Arg Asn Gly Gly Ser Cys Val Gln
          85           90           95
Pro Gly Arg Cys Arg Cys Pro Ala Gly Trp Arg Gly Asp Thr Cys Gln
          100          105          110
Ser Asp Val Asp Xaa Cys Asn Glu Gly Arg Ser Ala Glu Ala Ala Val
          115          120          125
Gln Gly Gly Pro Ala Gly Gly Glu Ala Ala Ala Gly Thr Gly Pro Thr
          130          135          140
Ala Gln Pro Gly Leu Ala Gly Thr Gly
145           150

```

<210> 2805

<211> 771

<212> DNA

<213> Homo sapiens

<400> 2805

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120
gatctctgga atagctacca ggcaaagaaa aaaactatgg atgccaagaa tggccagaca
180
atgaatgaga agcaactctt ccatgggaca gatgccggct ccgtgccaca cgtcaatcga
240
aatggccttta accgcagcta tgccggaaag aatgctgtgg catatggaaa gggaaacctat
300
tttgcgtgca atgccaatta ttctgccaat gatacgtact ccagaccaga tgcaaatggg
360
agaaagcatg tgtattatgt gcgagtactt actggaatct atacacatgg aaatcattca
420
ttaattgtgc ctcttcaaa gaacctcaa aatcctactg acctgtatga cactgtcaca
480
gataatgtgc accatccaag tttatttgtg gcattttatg actaccaagc ataccagag
540
taccttatta cgttttagaaa ataacacttt ggtatccttc ccacaaaatt attctccatt
600
tgtacatata tagttgtaaa acaagtttta gctttttttt ttaattcctc ttaacagatt
660
tttctaatat ccaaggatca ttctttgtcg ctgcagtcag atctttcttc agctttctct
720
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771

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<210> 2806
 <211> 187
 <212> PRT
 <213> Homo sapiens

<400> 2806
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 Thr Val Ala Ser Lys Phe Asn Gln Thr Cys Ser His Phe Arg Ile Glu
 20 25 30
 Lys Ile Glu Arg Ile Gln Asn Pro Asp Leu Trp Asn Ser Tyr Gln Ala
 35 40 45
 Lys Lys Lys Thr Met Asp Ala Lys Asn Gly Gln Thr Met Asn Glu Lys
 50 55 60
 Gln Leu Phe His Gly Thr Asp Ala Gly Ser Val Pro His Val Asn Arg
 65 70 75 80
 Asn Gly Phe Asn Arg Ser Tyr Ala Gly Lys Asn Ala Val Ala Tyr Gly
 85 90 95
 Lys Gly Thr Tyr Phe Ala Val Asn Ala Asn Tyr Ser Ala Asn Asp Thr
 100 105 110
 Tyr Ser Arg Pro Asp Ala Asn Gly Arg Lys His Val Tyr Tyr Val Arg
 115 120 125
 Val Leu Thr Gly Ile Tyr Thr His Gly Asn His Ser Leu Ile Val Pro
 130 135 140
 Pro Ser Lys Asn Pro Gln Asn Pro Thr Asp Leu Tyr Asp Thr Val Thr
 145 150 155 160
 Asp Asn Val His His Pro Ser Leu Phe Val Ala Phe Tyr Asp Tyr Gln
 165 170 175
 Ala Tyr Pro Glu Tyr Leu Ile Thr Phe Arg Lys
 180 185

<210> 2807
 <211> 1660
 <212> DNA
 <213> Homo sapiens

<400> 2807
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 120
 cccaggtgct cagggccgcc tgtgaatgca ggtgccttgt cccaaacaga ggacatatta
 180
 atagggccat gatttcctgt tgccacaatt ttgccaaggc aggctggcac cagaacacca
 240
 aagaagggaa attatagtgg agtagcagtt tgtgaatctg gagtccttgg ttcaatcaca
 300
 gaacaagtag ggagaggagc caggacctag gccttcaggt tttcagcaag gaaggactct
 360
 caggccatcc ttgcagttca gttaacagga ggaagcaagg atccccagag agctggagta
 420
 ctctgactct cggatagaaa ggcaggacaa tcggagcctg gggttcacgt gagtcaggaa
 480

agggagctct ccacactgga atcgctgtag ccgaggaggt tctaattggga cgatcttcga
 540
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 600
 aagtgtccag aggaacatgg tcatgggctc gtcaaccctg gctgaagact caagttgggc
 660
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 720
 ggccactct ctaggacaca gccctagtgc tgctgccaca tgggtgattcc tacagggtcac
 780
 cacggcttcg gcagtcccat cctccaccag gagcctgatg atggcctggc ttatagctgt
 840
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 900
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 960
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 1020
 aacgctgatg gtggtctcag ggggaaaact caggacctgc acataagtgg atgaccggaa
 1080
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 1140
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 1200
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 1560
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 1620
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<210> 2808

<211> 390

<212> PRT

<213> Homo sapiens

<400> 2808

Met	Leu	Phe	Glu	Lys	Asp	Gly	Ser	Ser	Cys	Ile	Ser	Arg	Arg	Pro	Leu
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Glu	Leu	Ala	Gly	Cys	Ala	Ser	Cys	Leu	Thr	Val	Gln	Asp	Asn	Trp	Thr
			20					25					30		
Leu	Glu	Leu	Glu	Ser	Ser	Gln	Asp	Ile	Gln	Asp	Val	Leu	Asp	Ala	Asn
			35				40					45			
Lys	Ser	Leu	Pro	Glu	Ser	Ser	Leu	Thr	Asp	Leu	Leu	Ser	Asp	Asn	Phe

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      50      55      60
Thr Asp Ser Leu Val Ser Phe Ser Ala Glu Ile Leu Ser Arg Thr Leu
65      70      75      80
Cys Glu Pro Leu Val Ala Ser Leu Trp Met Lys Leu Gly Asn Thr Gly
      85      90      95
Ala Met Arg Arg Cys Val Lys Leu Thr Val Ala Leu Glu Thr Ala Glu
      100      105      110
Cys Glu Phe Pro Pro His Leu Asp Val Tyr Ile Glu Asp Pro His Leu
      115      120      125
Pro Pro Ser Leu Gly Leu Leu Pro Gly Ala Arg Val His Phe Ser Gln
      130      135      140
Leu Glu Lys Arg Val Ser Arg Ser His Asn Val Tyr Cys Cys Phe Arg
145      150      155      160
Ser Ser Thr Tyr Val Gln Val Leu Ser Phe Pro Pro Glu Thr Thr Ile
      165      170      175
Ser Val Pro Leu Pro His Ile Tyr Leu Ala Glu Leu Leu Gln Gly Gly
      180      185      190
Gln Ser Pro Phe Gln Ala Thr Ala Ser Cys His Ile Val Ser Val Phe
      195      200      205
Ser Leu Gln Leu Phe Trp Val Cys Ala Tyr Cys Thr Ser Ile Cys Arg
      210      215      220
Gln Gly Lys Cys Thr Arg Leu Gly Ser Thr Cys Pro Thr Gln Thr Ala
225      230      235      240
Ile Ser Gln Ala Ile Ile Arg Leu Leu Val Glu Asp Gly Thr Ala Glu
      245      250      255
Ala Val Val Thr Cys Arg Asn His His Val Ala Ala Ala Leu Gly Leu
      260      265      270
Cys Pro Arg Glu Trp Ala Ser Leu Leu Asp Phe Val Gln Val Pro Gly
      275      280      285
Arg Val Val Leu Gln Phe Ala Gly Pro Gly Ala Gln Leu Glu Ser Ser
      290      295      300
Ala Arg Val Asp Glu Pro Met Thr Met Phe Leu Trp Thr Leu Cys Thr
305      310      315      320
Ser Pro Ser Val Leu Arg Pro Ile Val Leu Ser Phe Glu Leu Glu Arg
      325      330      335
Lys Pro Ser Lys Ile Val Pro Leu Glu Pro Pro Arg Leu Gln Arg Phe
      340      345      350
Gln Cys Gly Glu Leu Pro Phe Leu Thr His Val Asn Pro Arg Leu Arg
      355      360      365
Leu Ser Cys Leu Ser Ile Arg Glu Ser Glu Tyr Ser Ser Ser Leu Gly
      370      375      380
Ile Leu Ala Ser Ser Cys
385      390

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<210> 2809

<211> 1502

<212> DNA

<213> Homo sapiens

<400> 2809

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120

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actgttaagc gctggcccag tccccccacc ccaccacagcc gtgtactgcc tgggctcccc
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1502

<210> 2810

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2810

Glu Cys Ala Cys Ala Arg Val Cys Val Cys Val Arg Leu Cys Val Arg
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 Ala Cys Val Cys Ala Cys Val Arg Leu Cys Val Arg Leu Cys Ala Cys
 35 40 45
 Val Cys Ala Ser Val Cys Met Cys Ala Arg Ala Xaa Val Cys Val Cys
 50 55 60
 Thr Cys Val Xaa Leu Cys Thr Arg Val Cys Val Cys Val His Ala Cys
 65 70 75 80
 Val Cys Val Cys Ala Arg Ala Cys Thr Ser Pro Pro Glu His Leu Gly
 85 90 95
 Phe Gly Thr Arg Trp Phe
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<210> 2811

<211> 591

<212> DNA

<213> Homo sapiens

<400> 2811

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 120
 caaaggagac cataaagtgt aggatatttc ctggttagt gctgccgggt aatcacgatg
 180
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<210> 2812

<211> 131

<212> PRT

<213> Homo sapiens

<400> 2812

Met His Pro Ser Ser Ser Ala Ser Gln Pro Ser Val Ala Arg Arg Gln
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 Ser Pro Ser Leu Gly Gly Lys Ser Pro Glu Pro Ser Leu Pro Xaa Cys
 20 25 30
 Pro Ala Pro Ala Val Asp Glu Pro Gln Pro Xaa Ser Gln Ala Pro Pro

```

      35      40      45
Gly Pro Arg Val Pro Gly Pro Pro Arg Pro Trp Gly Ala Ala Pro Leu
      50      55      60
Arg Pro Arg Pro Gly Glu Gly Asp Pro Val Thr Arg Glu Arg Ser Pro
65      70      75      80
Val Pro Gly Ala Thr Glu Met Pro Pro Pro Arg Pro Lys Val Pro Ala
      85      90      95
Pro Pro Gly Pro Thr Gly Arg Ser Pro Arg Ala Ala Val Gly His His
      100      105      110
Arg Ala Ala Gly Pro Pro Gly Cys Val Gly Pro Ser Leu Ser Gly Gln
      115      120      125
Leu Gly Ser
      130

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<210> 2813
 <211> 2417
 <212> DNA
 <213> Homo sapiens

<400> 2813
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 120
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 180
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 1020

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1080
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<211> 471

<212> PRT

<213> Homo sapiens

<400> 2814
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 65 70 75 80
 Ala Asp Asn Gln Arg Leu Lys Tyr Glu Val Glu Ala Leu Lys Glu Lys
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 Leu Glu His Gln Tyr Ala Gln Ser Tyr Lys Gln Val Ser Val Leu Glu
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 Asp Asp Leu Ser Gln Thr Arg Ala Ile Lys Glu Gln Leu His Lys Tyr
 115 120 125
 Val Arg Glu Leu Glu Gln Ala Asn Asp Asp Leu Glu Arg Ala Lys Arg
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 Ala Thr Ile Val Ser Leu Glu Thr Leu Asn Lys Leu Asn Gln Ala Ile
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 Glu Arg Asn Ala Phe Leu Glu Ser Glu Leu Asp Glu Lys Glu Ser Leu
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 Leu Val Ser Val Gln Arg Leu Lys Asp Glu Ala Arg Asp Leu Arg Gln
 180 185 190
 Glu Leu Ala Val Arg Glu Arg Gln Gln Glu Val Thr Arg Lys Ser Ala
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 Pro Ser Ser Pro Thr Leu Asp Cys Glu Lys Met Asp Ser Ala Val Gln
 210 215 220
 Ala Ser Leu Ser Leu Pro Ala Thr Pro Val Gly Lys Gly Thr Glu Asn
 225 230 235 240
 Thr Phe Pro Ser Pro Lys Ala Ile Pro Asn Gly Phe Gly Thr Ser Pro
 245 250 255
 Leu Thr Pro Ser Ala Arg Ile Ser Ala Leu Asn Ile Val Gly Asp Leu
 260 265 270
 Leu Arg Lys Val Gly Ala Leu Glu Ser Lys Leu Ala Ala Cys Arg Asn
 275 280 285
 Phe Ala Lys Asp Gln Ala Ser Arg Lys Ser Tyr Ile Ser Gly Asn Val
 290 295 300
 Asn Cys Gly Val Leu Asn Gly Asn Gly Thr Lys Phe Ser Arg Ser Gly
 305 310 315 320
 His Thr Ser Phe Phe Asp Lys Gly Ala Val Asn Gly Phe Asp Pro Ala
 325 330 335
 Pro Pro Pro Pro Gly Leu Gly Ser Ser Arg Pro Ser Ser Ala Pro Gly
 340 345 350
 Met Cys Leu Ser Val Cys Glu Cys Leu Ala Ser Arg Gly Ala Pro Ala
 355 360 365
 Leu Leu Gln Gln Pro Arg Thr Pro Thr Pro His Pro Ser Val Pro Gly
 370 375 380
 Pro Ser Pro Val Pro Leu Arg Leu Pro Pro His Gly Trp Gln Arg Ala
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 Gly Cys Met Gln Trp Arg Leu Leu Gly Pro Ala Gln Pro Arg Asn Ser
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<212> DNA
<213> Homo sapiens
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<211> 307

<212> PRT

<213> Homo sapiens

<400> 2816

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65					70				75					80	
Pro	Ala	Arg	Pro	Arg	Tyr	Ala	Cys	Cys	Pro	Gly	Trp	Lys	Arg	Thr	Ser
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		100					105					110			
Asn	Gly	Gly	Ser	Cys	Val	Gln	Pro	Gly	Arg	Cys	Arg	Cys	Pro	Ala	Gly
	115					120				125					
Trp	Arg	Gly	Asp	Thr	Cys	Gln	Ser	Asp	Val	Asp	Glu	Cys	Ser	Ala	Arg
	130				135				140						
Arg	Gly	Gly	Cys	Pro	Gln	Arg	Cys	Val	Asn	Thr	Ala	Gly	Ser	Tyr	Trp
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Cys	Gln	Cys	Trp	Glu	Gly	His	Ser	Leu	Ser	Ala	Asp	Gly	Thr	Leu	Cys
			165					170					175		
Val	Pro	Lys	Gly	Gly	Pro	Pro	Arg	Val	Ala	Pro	Asn	Pro	Thr	Gly	Val
		180					185					190			
Asp	Ser	Ala	Met	Lys	Glu	Glu	Val	Gln	Arg	Leu	Gln	Ser	Arg	Val	Asp
	195					200					205				
Leu	Leu	Glu	Glu	Lys	Leu	Gln	Leu	Val	Leu	Ala	Pro	Leu	His	Ser	Leu
	210					215				220					
Ala	Ser	Gln	Ala	Gly	Ala	Trp	Ala	Pro	Gly	Pro	Arg	Gln	Pro	Pro	Gly
225				230					235					240	
Ala	Leu	Leu	Pro	Ala	Ala	Arg	Pro	His	Arg	Leu	Pro	Glu	Arg	Ala	Asp
			245					250					255		
Phe	Leu	Pro	Gly	Gly	Ala	Ala	Gly	Val	Leu	Leu	Leu	Gln	Glu	Arg	Leu
		260					265					270			
Xaa	Asp	Cys	Pro	Ala	Pro	Gln	Ala	Gly	Leu	Ser	Pro	Ser	Arg	Arg	Pro
	275					280					285				
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<210> 2817
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 <213> Homo sapiens

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 219

<210> 2818
 <211> 73
 <212> PRT
 <213> Homo sapiens

<400> 2818
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 Pro Gly Ala Ser Leu Gly Pro Gly Val Leu Leu Arg Ala Glu Phe His
 35 40 45
 Gln His Gln His Thr His Gln His Thr His Gln His Thr His Gln His
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 Gln His Thr Phe Ala Pro Phe Thr Arg
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 <211> 730
 <212> DNA
 <213> Homo sapiens

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<211> 195

<212> PRT

<213> Homo sapiens

<400> 2820

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			20					25					30		
Ser	Ala	Gly	Ala	Arg	Gly	His	Thr	Gly	Pro	Lys	Gly	Gln	Lys	Gly	Ser
		35					40					45			
Met	Gly	Ala	Pro	Gly	Glu	Arg	Cys	Lys	Ser	His	Tyr	Ala	Ala	Phe	Ser
	50					55					60				
Val	Gly	Arg	Glu	Ala	His	Ala	Gln	Gln	Pro	Leu	Leu	Pro	Asp	Val	Ile
65					70					75				80	
Phe	Asp	Thr	Glu	Phe	Val	Asn	Leu	Tyr	Asp	His	Phe	Asn	Met	Phe	Thr
			85					90					95		
Gly	Lys	Phe	Tyr	Cys	Tyr	Val	Pro	Gly	Leu	Tyr	Phe	Phe	Ser	Leu	Asn
		100						105					110		
Val	His	Thr	Trp	Asn	Gln	Lys	Glu	Thr	Tyr	Leu	His	Ile	Met	Lys	Asn
		115					120					125			
Glu	Glu	Glu	Val	Val	Ile	Leu	Phe	Ala	Gln	Val	Gly	Asp	Arg	Ser	Ile
	130					135					140				
Met	Gln	Ser	Gln	Ser	Leu	Met	Leu	Glu	Leu	Arg	Glu	Gln	Asp	Gln	Val
145					150					155				160	
Trp	Val	Arg	Leu	Tyr	Lys	Gly	Glu	Arg	Glu	Asn	Ala	Ile	Phe	Ser	Glu
			165					170					175		
Glu	Leu	Asp	Thr	Tyr	Ile	Thr	Phe	Ser	Gly	Tyr	Leu	Val	Lys	His	Ala
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<210> 2821

<211> 1746

<212> DNA

<213> Homo sapiens

<400> 2821

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660
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720
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<210> 2822

<211> 424

<212> PRT

<213> Homo sapiens

<400> 2822

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Leu	Ser	Asn	Ile	Ile	Asn	Lys	Leu	Leu	Glu	Thr	Lys	Asn	Glu	Leu	His	35	40	45	
Lys	His	Val	Glu	Phe	Asp	Phe	Leu	Ile	Lys	Gly	Gln	Phe	Leu	Arg	Met	50	55	60	
Pro	Leu	Asp	Lys	His	Met	Glu	Met	Glu	Asp	Ile	Ser	Ser	Glu	Glu	Val	65	70	75	80
Val	Glu	Ile	Glu	Tyr	Val	Glu	Lys	Tyr	Thr	Ala	Pro	Gln	Pro	Glu	Gln	85	90	95	
Cys	Met	Phe	His	Asp	Asp	Trp	Ile	Ser	Ser	Ile	Lys	Gly	Ala	Glu	Glu	100	105	110	
Trp	Ile	Leu	Thr	Gly	Ser	Tyr	Gly	Lys	Thr	Ser	Arg	Ile	Trp	Ser	Leu	115	120	125	
Glu	Gly	Lys	Ser	Ile	Met	Thr	Ile	Val	Gly	His	Thr	Asp	Val	Val	Lys	130	135	140	
Asp	Val	Ala	Trp	Val	Lys	Lys	Asp	Ser	Leu	Ser	Cys	Leu	Leu	Xaa	Glu	145	150	155	160
Cys	Phe	Tyr	Gly	Ser	Asp	Tyr	Ser	Leu	Met	Gly	Val	Glu	Cys	Arg	Glu	165	170	175	
Lys	Gln	Ser	Glu	Ser	Pro	Thr	Leu	Leu	Xaa	Arg	Gly	His	Ala	Gly	Ser	180	185	190	
Val	Asp	Ser	Ile	Ala	Val	Asp	Gly	Ser	Gly	Thr	Lys	Phe	Cys	Ser	Gly	195	200	205	
Ser	Trp	Asp	Lys	Met	Leu	Lys	Ile	Trp	Ser	Thr	Val	Pro	Thr	Asp	Glu	210	215	220	
Glu	Asp	Glu	Met	Glu	Glu	Ser	Thr	Asn	Arg	Pro	Arg	Lys	Lys	Gln	Lys	225	230	235	240
Thr	Glu	Gln	Leu	Gly	Leu	Thr	Arg	Thr	Pro	Ile	Val	Thr	Leu	Ser	Gly	245	250	255	
His	Met	Glu	Ala	Val	Ser	Ser	Val	Leu	Trp	Ser	Asp	Ala	Glu	Glu	Ile	260	265	270	
Cys	Ser	Ala	Ser	Trp	Asp	His	Thr	Ile	Arg	Val	Trp	Asp	Val	Glu	Ser	275	280	285	
Gly	Ser	Leu	Lys	Ser	Thr	Leu	Thr	Gly	Asn	Lys	Val	Phe	Asn	Cys	Ile	290	295	300	
Ser	Tyr	Ser	Pro	Leu	Cys	Lys	Arg	Leu	Ala	Ser	Gly	Ser	Thr	Asp	Arg	305	310	315	320
His	Ile	Arg	Leu	Trp	Asp	Pro	Arg	Thr	Lys	Asp	Gly	Ser	Leu	Val	Ser	325	330	335	
Leu	Ser	Leu	Thr	Ser	His	Thr	Gly	Trp	Val	Thr	Ser	Val	Lys	Trp	Ser				

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Pro Thr His Glu Gln Gln Leu Ile Ser Gly Ser Leu Asp Asn Ile Val
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Lys Leu Trp Asp Thr Arg Ser Cys Lys Ala Pro Leu Tyr Asp Leu Ala
          370          375          380
Ala His Glu Asp Lys Val Leu Ser Val Asp Trp Thr Asp Thr Gly Leu
385          390          395          400
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<210> 2823
 <211> 461
 <212> DNA
 <213> Homo sapiens

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<210> 2824
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 <212> PRT
 <213> Homo sapiens

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Leu Gln Ala Gln Ala His Thr Gly Pro Ala Ser Pro Ala Ala Leu Pro
          35          40          45
Lys Gly Asp Ala Cys Asp Cys Val Cys Leu Pro Thr Gly Val Thr Thr
          50          55          60
His Pro Arg Pro Pro Glu Pro Gln His Glu Gly Ser Ala Pro Phe Pro
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His

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<210> 2825

<211> 1520

<212> DNA

<213> Homo sapiens

<400> 2825

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<210> 2826

<211> 506

<212> PRT

<213> Homo sapiens

<400> 2826

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			20					25					30		
Thr	Ala	Leu	Met	Glu	Ala	Cys	Met	Asp	Gly	His	Val	Glu	Val	Ala	Arg
		35					40					45			
Leu	Leu	Leu	Asp	Ser	Gly	Ala	Gln	Val	Asn	Met	Pro	Ala	Asp	Ser	Phe
	50					55				60					
Glu	Ser	Pro	Leu	Thr	Leu	Ala	Ala	Cys	Gly	Gly	His	Val	Glu	Leu	Ala
65					70				75						80
Ala	Leu	Leu	Ile	Glu	Arg	Gly	Ala	Asn	Leu	Glu	Glu	Val	Asn	Asp	Glu
			85					90					95		
Gly	Tyr	Thr	Pro	Leu	Met	Glu	Ala	Ala	Arg	Glu	Gly	His	Glu	Glu	Met
			100					105					110		
Val	Ala	Leu	Leu	Leu	Ser	Thr	Arg	Ser	Xaa	Ile	Ser	Met	His	Arg	Gln
		115					120					125			
Lys	Lys	Leu	Lys	Lys	Leu	Leu	Leu	Thr	Leu	Ala	Cys	Cys	Gly	Gly	Phe
	130					135				140					
Leu	Glu	Val	Ala	Asp	Phe	Leu	Ile	Lys	Ala	Gly	Ala	Asp	Ile	Glu	Leu
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<211> 481

<212> DNA

<213> Homo sapiens

<400> 2827

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<210> 2828

<211> 160

<212> PRT

<213> Homo sapiens

<400> 2828

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Ser Cys Leu Arg Ser Leu Val Leu Lys Arg Gly Gln Arg Arg Asp Thr			
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<400> 2829

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<212> PRT

<213> Homo sapiens

<400> 2830

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<210> 2831
<211> 3986
<212> DNA
<213> Homo sapiens
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<400> 2832

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Ala	Ser	Leu	Arg	Arg	Val	Glu	Leu	Ser	Gly	Pro	Lys	Ala	Ala	Glu	Pro
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Val	Ser	Arg	Arg	Thr	Glu	Leu	Ser	Ile	Asp	Ile	Ser	Ser	Lys	Gln	Val
	130					135					140				
Glu	Asn	Ala	Gly	Ala	Ile	Gly	Pro	Ser	Arg	Phe	Gly	Leu	Lys	Arg	Ala
145					150					155					160
Glu	Val	Leu	Gly	His	Lys	Thr	Pro	Glu	Pro	Ala	Pro	Arg	Arg	Thr	Glu
				165					170					175	
Ile	Thr	Ile	Val	Lys	Pro	Gln	Glu	Ser	Ala	His	Arg	Arg	Met	Glu	Pro
			180					185					190		
Pro	Ala	Ser	Lys	Val	Pro	Glu	Val	Pro	Thr	Ala	Pro	Ala	Thr	Asp	Ala
		195					200						205		
Ala	Pro	Lys	Arg	Val	Glu	Ile	Gln	Met	Pro	Lys	Pro	Ala	Glu	Ala	Pro
	210					215					220				
Thr	Ala	Pro	Ser	Pro	Ala	Gln	Thr	Leu	Glu	Asn	Ser	Glu	Pro	Ala	Pro
225					230					235					240
Val	Ser	Gln	Leu	Gln	Ser	Arg	Leu	Glu	Pro	Lys	Pro	Gln	Pro	Pro	Val
				245					250					255	
Ala	Glu	Ala	Thr	Pro	Arg	Ser	Gln	Glu	Ala	Thr	Glu	Ala	Ala	Pro	Ser
			260					265					270		
Cys	Val	Gly	Asp	Met	Ala	Asp	Thr	Pro	Arg	Asp	Ala	Gly	Leu	Lys	Gln
		275					280					285			
Ala	Pro	Ala	Ser	Arg	Asn	Glu	Lys	Ala	Pro	Val	Asp	Phe	Gly	Tyr	Val
	290					295					300				
Gly	Ile	Asp	Ser	Ile	Leu	Glu	Gln	Met	Arg	Arg	Lys	Ala	Met	Lys	Gln
305					310					315					320
Gly	Phe	Glu	Phe	Asn	Ile	Met	Val	Val	Gly	Gln	Ser	Gly	Leu	Gly	Lys
				325					330					335	
Ser	Thr	Leu	Ile	Asn	Thr	Leu	Phe	Lys	Ser	Lys	Ile	Ser	Arg	Lys	Ser
			340					345					350		
Val	Gln	Pro	Thr	Ser	Glu	Glu	Arg	Ile	Pro	Lys	Thr	Ile	Glu	Ile	Lys
		355					360					365			
Ser	Ile	Thr	His	Asp	Ile	Glu	Glu	Lys	Gly	Val	Arg	Met	Lys	Leu	Thr

370	375	380
Val Ile Asp Thr Pro Gly Phe Gly Asp His Ile Asn Asn Glu Asn Cys		
385	390	395
Trp Gln Pro Ile Met Lys Phe Ile Asn Asp Gln Tyr Glu Lys Tyr Leu		400
	405	410
Gln Glu Glu Val Asn Ile Asn Arg Lys Lys Arg Ile Pro Asp Thr Arg		415
	420	425
Val His Cys Cys Leu Tyr Phe Ile Pro Ala Thr Gly His Ser Leu Arg		430
	435	440
Pro Leu Asp Ile Glu Phe Met Lys Arg Leu Ser Lys Val Val Asn Ile		445
	450	455
Val Pro Val Ile Ala Lys Ala Asp Thr Leu Thr Leu Glu Glu Arg Val		460
	465	470
His Phe Lys Gln Arg Ile Thr Ala Asp Leu Leu Ser Asn Gly Ile Asp		475
	485	490
Val Tyr Pro Gln Lys Glu Phe Asp Glu Asp Ser Glu Asp Arg Leu Val		495
	500	505
Asn Glu Lys Phe Arg Glu Met Ile Pro Phe Ala Val Val Gly Ser Asp		510
	515	520
His Glu Tyr Gln Val Asn Gly Lys Arg Ile Leu Gly Arg Lys Thr Lys		525
	530	535
Trp Gly Thr Ile Glu Val Glu Asn Thr Thr His Cys Glu Phe Ala Tyr		540
	545	550
Leu Arg Asp Leu Leu Ile Arg Thr His Met Gln Asn Ile Lys Asp Ile		555
	565	570
Thr Ser Ser Ile His Phe Glu Ala Tyr Arg Val Lys Arg Leu Asn Glu		575
	580	585
Gly Ser Ser Ala Met Ala Asn Gly Val Glu Glu Lys Glu Pro Glu Ala		590
	595	600
Pro Glu Met		
610		

<210> 2833

<211> 420

<212> DNA

<213> Homo sapiens

<400> 2833

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120
ctccggctgc tcaggtcccc aacgctccgg ggccatggag gtgcttccgg ccggaatgtg
180
actactggga gtctcgggga gccgcagtgg ctgagggtag ccaccggggg gcgccctgga
240
acatcgccgg ccttggttctc cggacgtggg gcagccaccg gggggcgcca gggaggacgc
300
ttcgatacca aatgcctcgc ggctgccact tggggacgcc ttcttggtcc cgaagaaaca
360
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420

<210> 2834

<211> 117
 <212> PRT
 <213> Homo sapiens

<400> 2834
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 20 25 30
 Ser Gly Arg Asn Val Thr Thr Gly Ser Leu Gly Glu Pro Gln Trp Leu
 35 40 45
 Arg Val Ala Thr Gly Gly Arg Pro Gly Thr Ser Pro Ala Leu Phe Ser
 50 55 60
 Gly Arg Gly Ala Ala Thr Gly Gly Arg Gln Gly Gly Arg Phe Asp Thr
 65 70 75 80
 Lys Cys Leu Ala Ala Ala Thr Trp Gly Arg Leu Pro Gly Pro Glu Glu
 85 90 95
 Thr Leu Pro Gly Gln Asp Ser Trp Asn Gly Val Pro Ser Arg Ala Gly
 100 105 110
 Leu Gly Met Cys Ala
 115

<210> 2835
 <211> 938
 <212> DNA
 <213> Homo sapiens

<400> 2835
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 gcccaaggcg ggggagtggt gaagagaggg aaggagagagc ccccgagga agtacatgaa
 120
 tgagtgggtt actgctgcgg gcaactggga ctccatcttg ctgggcatcc tctgagagtt
 180
 tatgtagaat acacttcaga attgtcctgc tcaaggacaa tgaagctgag gtcctgctcc
 240
 ttattgactc aggggtgctg ctctgggga cattaacccc ccaacacttc tagcttgccc
 300
 agtgactga ctgagcacac agctgtggcc accagagaac ctctttgggc tgtgatacag
 360
 gaaaccatcg gtgtgcatgg taactctcta gcagtgtcct tcatgccggg acatggggac
 420
 acgggcaggc actgctggca tctgctaacc ccggaggccc atacttcaga accggtcagc
 480
 tgggccaagg cctctctaag gccagcggc tctcatgggc aaatgtcagg tgacacagag
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 tcagagaccc tgagtgtgag aggggaagat attggtgaag acctgttctc tgaggccctg
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 660
 agcattctgg attcctctgc gggctctgct cccactacg aggtgtttgt ggcgctgagg
 720
 gggctgagga atctgtcaga ggaaaatcga gacaagctgg accactgcct tcaggaagcc
 780

tctccccgct acaagtcctt gcggttcttg ggcagcgtgg gccctgcaga gtccacctgg
840
tggtgtcctg agtcaagtc tgcctccaccg cccagctccc cccagaggcc acctcgcccc
900
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938

<210> 2836
<211> 178
<212> PRT
<213> Homo sapiens

<400> 2836
Met Pro Gly His Gly Asp Thr Gly Arg His Cys Trp His Leu Leu Thr
1 5 10 15
Pro Glu Ala His Thr Ser Glu Pro Val Ser Trp Ala Lys Ala Ser Leu
20 25 30
Arg Pro Ser Gly Ser His Gly Gln Met Ser Gly Asp Thr Glu Ser Glu
35 40 45
Thr Leu Ser Val Arg Gly Glu Asp Ile Gly Glu Asp Leu Phe Ser Glu
50 55 60
Ala Leu Gly Arg Ala Val Gly Gln Trp Ala Gly Ala Lys Leu Leu Asp
65 70 75 80
His Gly Cys Val Glu Ser Ser Ile Leu Asp Ser Ser Ala Gly Ser Ala
85 90 95
Pro His Tyr Glu Val Phe Val Ala Leu Arg Gly Leu Arg Asn Leu Ser
100 105 110
Glu Glu Asn Arg Asp Lys Leu Asp His Cys Leu Gln Glu Ala Ser Pro
115 120 125
Arg Tyr Lys Ser Leu Arg Phe Trp Gly Ser Val Gly Pro Ala Glu Ser
130 135 140
Thr Trp Trp Cys Pro Glu Ser Ser Pro Ala Pro Pro Pro Ser Ser Pro
145 150 155 160
Gln Arg Pro Pro Arg Pro Ser Leu Trp Asp Leu Ser Gly Trp Gly Val
165 170 175
Leu Gly

<210> 2837
<211> 1250
<212> DNA
<213> Homo sapiens

<400> 2837
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gttttcacaa tggaggactc cggaagact ttcagctccg aggaggaaga agctaactat
120
tggaagatc tggcgatgac ctacaaacag agggcagaaa atacgcaaga ggaactccga
180
gaattccagg agggaagccg agaatatgaa gctgaattgg agacgcagct gcaacaaatt
240
gaaaccagga acagagacct cctgtccgaa aataaccgcc ttcgcatgga gctggaaacc
300

atcaaggaga agtttgaagt gcagcactct gaaggctacc ggcagatctc agccttggag
 360
 gatgacctcg cgcagaccaa agccattaaa gaccaattgc agaaatacat cagagagctg
 420
 gagcaagcaa atgacgccct ggaaagagcc aagcgcgcca cgatcatgtc tctcgaagac
 480
 tttgagcagc gcttgaatca ggccatcgaa agaaatgcct tcctggaaag tgaacttgat
 540
 gaaaaagaga atctcctgga atctgttcag agactgaagg atgaagccag agatttgcgg
 600
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 660
 gaagctgaga ggacagacac agctgtgcag gccacgggct ccgtgccgtc cacgcccatt
 720
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 780
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 840
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 900
 gtgtacgatc agtccccaaa ccgaacaggt ggcccagcct ctgggcggag cagcaagaac
 960
 agagatggcg gggagagacg gccaaagcagc accagcgtgc ctttgggtga taaggggtca
 1020
 gtaccttcta ataaacctct cgctggcggg gagaaccgcg ctgccccagg caagagacac
 1080
 tcacccccag cccacagcca tgtgtctttt taaattatag gattatttca gcaaacctta
 1140
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<210> 2838

<211> 370

<212> PRT

<213> Homo sapiens

<400> 2838

Xaa	Leu	Pro	Ser	Ser	Pro	Leu	Leu	Glu	His	His	Ala	Thr	Arg	Arg	Val
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Ile	Ser	Ser	Pro	Val	Phe	Thr	Met	Glu	Asp	Ser	Gly	Lys	Thr	Phe	Ser
			20					25					30		
Ser	Glu	Glu	Glu	Glu	Ala	Asn	Tyr	Trp	Lys	Asp	Leu	Ala	Met	Thr	Tyr
		35					40					45			
Lys	Gln	Arg	Ala	Glu	Asn	Thr	Gln	Glu	Glu	Leu	Arg	Glu	Phe	Gln	Glu
		50				55					60				
Gly	Ser	Arg	Glu	Tyr	Glu	Ala	Glu	Leu	Glu	Thr	Gln	Leu	Gln	Gln	Ile
65					70				75					80	
Glu	Thr	Arg	Asn	Arg	Asp	Leu	Leu	Ser	Glu	Asn	Asn	Arg	Leu	Arg	Met
			85					90					95		
Glu	Leu	Glu	Thr	Ile	Lys	Glu	Lys	Phe	Glu	Val	Gln	His	Ser	Glu	Gly
			100				105					110			
Tyr	Arg	Gln	Ile	Ser	Ala	Leu	Glu	Asp	Asp	Leu	Ala	Gln	Thr	Lys	Ala

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<210> 2839
<211> 606
<212> DNA
<213> Homo sapiens
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120
agctgttcct tgcactacat ccacccttac caacccaatg agtatctgaa agctttggta
180
gctgtggggg agatttgcca agactatgac agtgacaaaa tgttccttgc ctttgggttt
240
ggcgccagga tacctccaga gtacacggtc tctcatgact ttgcaatcaa ctttaatgaa
300
gacaacccag aatgtgcagg aattcaagga gttgtggaag cctatcagag ctgtcttcct
360
aagctccaac tctacgggtcc caccaacatt gccccatca tccagaaggt tgccaagtca
420
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gcgtcagagg aaactaacac caaagaggca tcgcaatact tcatcctgct gatcctgaca
480
gatgggtgta tcacagacat gggcgacacc cgggaggcca ttgtccatgc ctcccacctc
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cccatgtcag tcatcatcgt gggagtaggg aacgctgact tcagtgcacat gcagatgctg
600
gacggt
606

<210> 2840
<211> 202
<212> PRT
<213> Homo sapiens

<400> 2840
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1 5 10 15
Ile Met Gly Gly Cys Gln Ile Gln Phe Thr Val Ala Ile Asp Phe Ala
20 25 30
Ala Thr Asn Gly Asp Pro Arg Asn Ser Cys Ser Leu His Tyr Ile His
35 40 45
Pro Tyr Gln Pro Asn Glu Tyr Leu Lys Ala Leu Val Ala Val Gly Glu
50 55 60
Ile Cys Gln Asp Tyr Asp Ser Asp Lys Met Phe Pro Ala Phe Gly Phe
65 70 75 80
Gly Ala Arg Ile Pro Pro Glu Tyr Thr Val Ser His Asp Phe Ala Ile
85 90 95
Asn Phe Asn Glu Asp Asn Pro Glu Cys Ala Gly Ile Gln Gly Val Val
100 105 110
Glu Ala Tyr Gln Ser Cys Leu Pro Lys Leu Gln Leu Tyr Gly Pro Thr
115 120 125
Asn Ile Ala Pro Ile Ile Gln Lys Val Ala Lys Ser Ala Ser Glu Glu
130 135 140
Thr Asn Thr Lys Glu Ala Ser Gln Tyr Phe Ile Leu Leu Ile Leu Thr
145 150 155 160
Asp Gly Val Ile Thr Asp Met Gly Asp Thr Arg Glu Ala Ile Val His
165 170 175
Ala Ser His Leu Pro Met Ser Val Ile Ile Val Gly Val Gly Asn Ala
180 185 190
Asp Phe Ser Asp Met Gln Met Leu Asp Gly
195 200

<210> 2841
<211> 2065
<212> DNA
<213> Homo sapiens

<400> 2841
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tcaccccagc cccccggctc tgcacccact gtgctgcca caggagtggc cctgcccattg
120
gaagggccag ttcaggtggc cggagctcct gagctgccct aggggactgc tgtgggtctg
180

aggtggtgat gteccccacg gctgcctgcg cctgagcccc cacgcatcca cccctggggc
240
cactctgctg ttcaggagca cccacccgtg tcctcgacca tgagcagccc cccagcttac
300
cctggcatca ggatctcagg gtgccggggc cttggagcag aaggcagcaa tgcagagtcc
360
ctggacaggc tcctgccacc tgtgggcact gggcgctctc cccggaagcg gaccaccagc
420
cagtgaagt cagagcctcc cctgctgctg acaagcaagc gtaccatcta caccgccggg
480
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540
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660
caccaggtgc tgactgagca gcagcaggaa caggccgcac acaacaactt caacttcgac
720
caccagatg cctttgactt cgacctcctc atttccaccc tcaagaagct gaagcagggg
780
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840
acactgtatg gtgcaaactg catcatcttt gagggcatca tggcctttgc tgacaagaca
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960
cgccggctgc gccgggacat cagtgaagcg ggccgggaca tcgaggggtgt catcaagcag
1020
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1080
gacatcgtgg tccccagagg gagcggcaac acggtggcca tcgacctgat tgtgcagcac
1140
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1200
cagtgccacc cgctgccccg gacgctgagc gtccctgaaga gcacgccgca ggtacggggc
1260
atgcacacca tcatcaggga caaggagacc agtcgcgacg agttcatctt ctactccaag
1320
agactgatgc ggctgctcat cgagcacgcg ctctccttcc tgccttttca ggactgcgtc
1380
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1440
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1620
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1680
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1740
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1800

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 1860
 cccgatggca gtgacgagga ggaagtggcc tacacggggt agctgcccag tgagccatcc
 1920
 cgtccccacc accctcctcc tgcctcctga cccaggactg ctgaatacaa agatgttaat
 1980
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 2040
 aaaaatgaaa aaaaaaaaaa aaaaa
 2065

<210> 2842

<211> 540

<212> PRT

<213> Homo sapiens

<400> 2842

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Ala	Leu	Gly	Ala	Glu	Gly	Ser	Asn	Ala	Glu	Ser	Leu	Asp	Arg	Leu	Leu
			20					25					30		
Pro	Pro	Val	Gly	Thr	Gly	Arg	Ser	Pro	Arg	Lys	Arg	Thr	Thr	Ser	Gln
		35					40					45			
Cys	Lys	Ser	Glu	Pro	Pro	Leu	Leu	Arg	Thr	Ser	Lys	Arg	Thr	Ile	Tyr
	50					55					60				
Thr	Ala	Gly	Arg	Pro	Pro	Trp	Tyr	Asn	Glu	His	Gly	Thr	Gln	Ser	Lys
65					70				75					80	
Glu	Ala	Phe	Ala	Ile	Gly	Leu	Gly	Gly	Gly	Ser	Ala	Ser	Gly	Lys	Thr
				85				90						95	
Thr	Val	Ala	Arg	Met	Ile	Ile	Glu	Ala	Leu	Asp	Val	Pro	Trp	Val	Val
			100					105					110		
Leu	Leu	Ser	Met	Asp	Ser	Phe	Tyr	Lys	Val	Leu	His	Ser	Leu	Pro	His
		115					120					125			
Gln	Val	Leu	Thr	Glu	Gln	Gln	Gln	Glu	Gln	Ala	Ala	His	Asn	Asn	Phe
	130					135					140				
Asn	Phe	Asp	His	Pro	Asp	Ala	Phe	Asp	Phe	Asp	Leu	Ile	Ile	Ser	Thr
145					150				155					160	
Leu	Lys	Lys	Leu	Lys	Gln	Gly	Lys	Ser	Val	Lys	Val	Pro	Ile	Tyr	Asp
			165					170						175	
Phe	Thr	Thr	His	Ser	Arg	Lys	Lys	Asp	Trp	Lys	Thr	Leu	Tyr	Gly	Ala
			180					185					190		
Asn	Val	Ile	Ile	Phe	Glu	Gly	Ile	Met	Ala	Phe	Ala	Asp	Lys	Thr	Leu
	195						200				205				
Leu	Glu	Leu	Leu	Asp	Met	Lys	Ile	Phe	Val	Asp	Thr	Asp	Ser	Asp	Ile
	210					215					220				
Arg	Leu	Val	Arg	Arg	Leu	Arg	Arg	Asp	Ile	Ser	Glu	Arg	Gly	Arg	Asp
225					230				235					240	
Ile	Glu	Gly	Val	Ile	Lys	Gln	Tyr	Asn	Lys	Phe	Val	Lys	Pro	Ser	Phe
			245					250						255	
Asp	Gln	Tyr	Ile	Gln	Pro	Thr	Met	Arg	Leu	Ala	Asp	Ile	Val	Val	Pro
		260					265					270			
Arg	Gly	Ser	Gly	Asn	Thr	Val	Ala	Ile	Asp	Leu	Ile	Val	Gln	His	Val
	275					280						285			
His	Ser	Gln	Leu	Glu	Glu	Arg	Glu	Leu	Ser	Val	Arg	Ala	Ala	Leu	Ala

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      290      295      300
Ser Ala His Gln Cys His Pro Leu Pro Arg Thr Leu Ser Val Leu Lys
305      310      315      320
Ser Thr Pro Gln Val Arg Gly Met His Thr Ile Ile Arg Asp Lys Glu
      325      330      335
Thr Ser Arg Asp Glu Phe Ile Phe Tyr Ser Lys Arg Leu Met Arg Leu
      340      345      350
Leu Ile Glu His Ala Leu Ser Phe Leu Pro Phe Gln Asp Cys Val Val
      355      360      365
Gln Thr Pro Gln Gly Gln Asp Tyr Ala Gly Lys Cys Tyr Ala Gly Lys
      370      375      380
Gln Ile Thr Gly Val Ser Ile Leu Arg Ala Gly Glu Thr Met Glu Pro
385      390      395      400
Ala Leu Arg Ala Val Cys Lys Asp Val Arg Ile Gly Thr Ile Leu Ile
      405      410      415
Gln Thr Asn Gln Leu Thr Gly Glu Pro Glu Leu His Tyr Leu Arg Leu
      420      425      430
Pro Lys Asp Ile Ser Asp Asp His Val Ile Leu Met Asp Cys Thr Val
      435      440      445
Ser Thr Gly Ala Ala Ala Met Met Ala Val Arg Val Leu Leu Asp His
      450      455      460
Asp Val Pro Glu Asp Lys Ile Phe Leu Leu Ser Leu Leu Met Ala Glu
465      470      475      480
Met Gly Val His Ser Val Ala Tyr Ala Phe Pro Arg Val Arg Ile Ile
      485      490      495
Thr Thr Ala Val Asp Lys Arg Val Asn Asp Leu Phe Arg Ile Ile Pro
      500      505      510
Gly Ile Gly Asn Phe Gly Asp Arg Tyr Phe Gly Thr Asp Ala Val Pro
      515      520      525
Asp Gly Ser Asp Glu Glu Glu Val Ala Tyr Thr Gly
530      535      540

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<210> 2843
 <211> 497
 <212> DNA
 <213> Homo sapiens

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<400> 2843
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120
caaagcccag aatttgaagc tcaaagttcc aaattccagg aaggtgcgga gatgcttctg
180
aaccccgagg aaaagagtcc tttgaatatc tccgtaggag ttcaccccct ggactccttc
240
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300
cccacagggg ccctgctgtc tacaccgcag tttgagatgc ttcagaatcc cctgggtctc
360
acaggagccc ttcgaggtcc aggtcggcgg ggtggccggg cccgggggtgg gcagggccct
420
cggcctaaca tctgtggcat ctgggggaag agcttcgggc gggactaccc tgatccagca
480

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caggcatcca caccggt
497

<210> 2844
<211> 165
<212> PRT
<213> Homo sapiens

<400> 2844
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Tyr Glu Pro Arg Ser Pro Gly Tyr Glu Ser Glu Ser Ser Arg Tyr Glu
20 25 30
Ser Gln Asn Thr Glu Leu Lys Thr Gln Ser Pro Glu Phe Glu Ala Gln
35 40 45
Ser Ser Lys Phe Gln Glu Gly Ala Glu Met Leu Leu Asn Pro Glu Glu
50 55 60
Lys Ser Pro Leu Asn Ile Ser Val Gly Val His Pro Leu Asp Ser Phe
65 70 75 80
Thr Gln Gly Phe Gly Glu Gln Pro Thr Gly Asp Leu Pro Ile Gly Pro
85 90 95
Pro Phe Glu Met Pro Thr Gly Ala Leu Leu Ser Thr Pro Gln Phe Glu
100 105 110
Met Leu Gln Asn Pro Leu Gly Leu Thr Gly Ala Leu Arg Gly Pro Gly
115 120 125
Arg Arg Gly Gly Arg Ala Arg Gly Gly Gln Gly Pro Arg Pro Asn Ile
130 135 140
Cys Gly Ile Trp Gly Lys Ser Phe Gly Arg Asp Tyr Pro Asp Pro Ala
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Gln Ala Ser Thr Pro
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<210> 2845
<211> 934
<212> DNA
<213> Homo sapiens

<400> 2845
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120
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180
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240
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300
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360
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420
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480

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 780
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<210> 2846

<211> 149

<212> PRT

<213> Homo sapiens

<400> 2846

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Leu	Pro	Cys	Pro	Leu	Gly	Ser	Gly	Arg	Leu	Trp	Leu	Met	Pro	Thr	Arg
			20					25					30		
Cys	His	Lys	Gly	Leu	Ser	Asp	Arg	Cys	Ser	Pro	Ser	Leu	Pro	Cys	Leu
		35					40					45			
Pro	His	Arg	Pro	Ser	Pro	Pro	Glu	Pro	Ala	Phe	Leu	Pro	Gln	His	Leu
	50					55					60				
Pro	Ser	Leu	Ala	Thr	Gly	Tyr	Ile	Cys	Val	Asp	Cys	Leu	Ser	Leu	His
65					70					75				80	
Gly	Asn	Val	Arg	Thr	Ile	Phe	Val	Cys	Cys	Gly	Thr	Ala	Ala	Leu	Arg
			85					90						95	
Ala	Ala	Ser	Ser	Thr	Gln	Val	Ala	Leu	Asp	Thr	Asp	Cys	Thr	Gln	Gly
			100					105					110		
Glu	Leu	Gly	Leu	Ile	Thr	Pro	Leu	Thr	Arg	Gly	Glu	Thr	Leu	Gln	Leu
		115					120					125			
Glu	Val	Thr	Phe	Ile	Pro	Leu	Gln	Leu	Arg	Pro	Phe	His	Ser	Pro	Arg
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Thr	His	Arg	Gly	Ala											
145															

<210> 2847

<211> 2830

<212> DNA

<213> Homo sapiens

<400> 2847

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 120

cagctctcac atgaccacga atctgttggc cctcctagcc tggatgctca gcccaactca
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360
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420
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480
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600
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1260
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1320
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1740

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 1800
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 2100
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 2160
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 2580
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 2700
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<210> 2848

<211> 856

<212> PRT

<213> Homo sapiens

<400> 2848

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Ser	Thr	Ser	Gln	Val	Pro	Ser	Ile	Ala	Thr	Val	Pro	Pro	Cys	Leu	Thr
			20					25					30		
Thr	Ser	Ala	Pro	Leu	Ile	Arg	Arg	Gln	Leu	Ser	His	Asp	His	Glu	Ser
		35					40					45			
Val	Gly	Pro	Pro	Ser	Leu	Asp	Ala	Gln	Pro	Asn	Ser	Lys	Thr	Glu	Arg
	50					55				60					
Ser	Lys	Ser	Tyr	Asp	Glu	Gly	Leu	Asp	Asp	Tyr	Arg	Glu	Asp	Ala	Lys

65					70					75				80	
Leu	Ser	Phe	Lys	His	Val	Ser	Ser	Leu	Lys	Gly	Ile	Lys	Ile	Ala	Asp
				85					90					95	
Ser	Gln	Lys	Ser	Ser	Glu	Asp	Ser	Gly	Ser	Arg	Lys	Asp	Ser	Ser	Ser
			100					105					110		
Glu	Val	Phe	Ser	Asp	Ala	Ala	Lys	Glu	Gly	Trp	Leu	His	Phe	Arg	Pro
		115					120					125			
Leu	Val	Thr	Asp	Lys	Gly	Lys	Arg	Val	Gly	Gly	Ser	Ile	Arg	Pro	Trp
		130				135					140				
Lys	Gln	Met	Tyr	Val	Val	Leu	Arg	Gly	His	Ser	Leu	Tyr	Leu	Tyr	Lys
145					150				155						160
Asp	Lys	Arg	Glu	Gln	Thr	Thr	Pro	Ser	Glu	Glu	Glu	Gln	Pro	Ile	Ser
			165					170					175		
Val	Asn	Ala	Cys	Leu	Ile	Asp	Ile	Ser	Tyr	Ser	Glu	Thr	Lys	Arg	Lys
		180						185					190		
Asn	Val	Phe	Arg	Leu	Thr	Thr	Ser	Asp	Cys	Glu	Cys	Leu	Phe	Gln	Ala
		195					200					205			
Glu	Asp	Arg	Asp	Asp	Met	Leu	Ala	Trp	Ile	Lys	Thr	Ile	Gln	Glu	Ser
		210				215					220				
Ser	Asn	Leu	Asn	Glu	Glu	Asp	Thr	Gly	Val	Thr	Asn	Arg	Asp	Leu	Ile
225					230					235					240
Ser	Arg	Arg	Ile	Lys	Glu	Tyr	Asn	Asn	Leu	Met	Ser	Lys	Ala	Glu	Gln
			245					250					255		
Leu	Pro	Lys	Thr	Pro	Arg	Gln	Ser	Leu	Ser	Ile	Arg	Gln	Thr	Leu	Leu
		260						265					270		
Gly	Ala	Lys	Ser	Glu	Pro	Lys	Thr	Gln	Ser	Pro	His	Ser	Pro	Lys	Glu
		275					280					285			
Glu	Ser	Glu	Arg	Lys	Leu	Leu	Ser	Lys	Asp	Asp	Thr	Ser	Pro	Pro	Lys
		290				295				300					
Asp	Lys	Gly	Thr	Trp	Arg	Lys	Gly	Ile	Pro	Ser	Ile	Met	Arg	Lys	Thr
305					310				315						320
Phe	Glu	Lys	Lys	Pro	Thr	Ala	Thr	Gly	Thr	Phe	Gly	Val	Arg	Leu	Asp
			325					330					335		
Asp	Cys	Pro	Pro	Ala	His	Thr	Asn	Arg	Tyr	Ile	Pro	Leu	Ile	Val	Asp
		340					345					350			
Ile	Cys	Cys	Lys	Leu	Val	Glu	Glu	Arg	Gly	Leu	Glu	Tyr	Thr	Gly	Ile
		355					360					365			
Tyr	Arg	Val	Pro	Gly	Asn	Asn	Ala	Ala	Ile	Ser	Ser	Met	Gln	Glu	Glu
		370				375						380			
Leu	Asn	Lys	Gly	Met	Ala	Asp	Ile	Asp	Ile	Gln	Asp	Asp	Lys	Trp	Arg
385					390					395					400
Asp	Leu	Asn	Val	Ile	Ser	Ser	Leu	Leu	Lys	Ser	Phe	Phe	Arg	Lys	Leu
			405					410					415		
Pro	Glu	Pro	Leu	Phe	Thr	Asn	Asp	Lys	Tyr	Ala	Asp	Phe	Ile	Glu	Ala
		420						425					430		
Asn	Arg	Lys	Glu	Asp	Pro	Leu	Asp	Arg	Leu	Lys	Thr	Leu	Lys	Arg	Leu
		435					440					445			
Ile	His	Asp	Leu	Pro	Glu	His	His	Tyr	Glu	Thr	Leu	Lys	Phe	Leu	Ser
		450				455					460				
Ala	His	Leu	Lys	Thr	Val	Ala	Glu	Asn	Ser	Glu	Lys	Asn	Lys	Met	Glu
465					470					475					480
Pro	Arg	Asn	Leu	Ala	Ile	Val	Phe	Gly	Pro	Thr	Leu	Val	Arg	Thr	Ser
			485					490					495		
Glu	Asp	Asn	Met	Thr	His	Met	Val	Thr	His	Met	Pro	Asp	Gln	Tyr	Lys

500 505 510
 Ile Val Glu Thr Leu Ile Gln His His Asp Trp Phe Phe Thr Glu Glu
 515 520 525
 Gly Ala Glu Glu Pro Leu Thr Thr Val Gln Glu Glu Ser Thr Val Asp
 530 535 540
 Ser Gln Pro Val Pro Asn Ile Asp His Leu Leu Thr Asn Ile Gly Arg
 545 550 555 560
 Thr Gly Val Ser Pro Gly Asp Val Ser Asp Ser Ala Thr Ser Asp Ser
 565 570 575
 Thr Lys Ser Lys Gly Ser Trp Gly Ser Gly Lys Asp Gln Tyr Ser Arg
 580 585 590
 Glu Leu Leu Val Ser Ser Ile Phe Ala Ala Ala Ser Arg Lys Arg Lys
 595 600 605
 Lys Pro Lys Glu Lys Ala Gln Pro Ser Ser Ser Glu Asp Glu Leu Asp
 610 615 620
 Asn Val Phe Phe Lys Lys Glu Asn Val Glu Gln Cys His Asn Asp Thr
 625 630 635 640
 Lys Glu Glu Ser Lys Lys Glu Ser Glu Thr Leu Gly Arg Lys Gln Lys
 645 650 655
 Ile Ile Ile Ala Lys Glu Asn Ser Thr Arg Lys Asp Pro Ser Thr Thr
 660 665 670
 Lys Asp Glu Lys Ile Ser Leu Gly Lys Glu Ser Thr Pro Ser Glu Glu
 675 680 685
 Pro Ser Pro Pro His Asn Ser Lys His Asn Lys Ser Pro Thr Leu Ser
 690 695 700
 Cys Arg Phe Ala Ile Leu Lys Glu Ser Pro Arg Ser Leu Leu Ala Gln
 705 710 715 720
 Lys Ser Ser His Leu Glu Glu Thr Gly Ser Asp Ser Gly Thr Leu Leu
 725 730 735
 Ser Thr Ser Ser Gln Ala Ser Leu Ala Arg Phe Ser Met Lys Lys Ser
 740 745 750
 Thr Ser Pro Glu Thr Lys His Ser Glu Phe Leu Ala Asn Val Ser Thr
 755 760 765
 Ile Thr Ser Asp Tyr Ser Thr Thr Ser Ser Ala Thr Tyr Leu Thr Ser
 770 775 780
 Leu Asp Ser Ser Arg Leu Ser Pro Glu Val Gln Ser Val Ala Glu Ser
 785 790 795 800
 Lys Gly Asp Glu Ala Asp Asp Glu Arg Ser Glu Leu Ile Ser Glu Gly
 805 810 815
 Arg Pro Val Glu Thr Asp Ser Gly Asn Glu Phe Pro Ile Phe Pro Thr
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<210> 2849

<211> 380

<212> DNA

<213> Homo sapiens

<400> 2849

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<210> 2850
 <211> 76
 <212> PRT
 <213> Homo sapiens

<400> 2850
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 Glu Glu Asp Lys Lys Asp Gly Lys Glu Pro Ser Asp Lys Pro Gln Lys
 35 40 45
 Ala Val Gln Asp His Lys Glu Pro Ser Asp Lys Pro Gln Lys Ala Val
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 Gln Pro Lys His Glu Val Gly Thr Lys Glu Gly Cys
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<210> 2851
 <211> 2459
 <212> DNA
 <213> Homo sapiens

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 180
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2160

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 2340
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<210> 2852

<211> 317

<212> PRT

<213> Homo sapiens

<400> 2852

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Leu	Tyr	Met	Leu	Val	Lys	Met	Ser	His	His	Val	Trp	Thr	Ala	Gln	Asn	35	40	45	
Val	Asp	Pro	Ala	Ser	Phe	Leu	Ser	Thr	Thr	Leu	Gly	Asn	Val	Leu	Val	50	55	60	
Thr	Val	Lys	Arg	Asn	Phe	Asp	Lys	Cys	Ile	Ser	Asn	Gln	Ile	Arg	Gln	65	70	75	80
Met	Glu	Glu	Val	Lys	Ile	Ser	Lys	Lys	Ser	Lys	Val	Gly	Ile	Leu	Pro	85	90	95	
Phe	Val	Ala	Glu	Phe	Glu	Glu	Phe	Ala	Gly	Leu	Ala	Glu	Ser	Ile	Phe	100	105	110	
Lys	Asn	Ala	Glu	Arg	Arg	Gly	Asp	Leu	Asp	Lys	Ala	Tyr	Thr	Lys	Leu	115	120	125	
Ile	Arg	Gly	Val	Phe	Val	Asn	Val	Glu	Lys	Val	Ala	Asn	Glu	Ser	Gln	130	135	140	
Lys	Thr	Pro	Arg	Asp	Val	Val	Met	Met	Glu	Asn	Phe	His	His	Ile	Phe	145	150	155	160
Ala	Thr	Leu	Ser	Arg	Leu	Lys	Ile	Ser	Cys	Leu	Glu	Ala	Glu	Lys	Lys	165	170	175	
Glu	Ala	Lys	Gln	Lys	Tyr	Thr	Asp	His	Leu	Gln	Ser	Tyr	Val	Ile	Tyr	180	185	190	
Ser	Leu	Gly	Gln	Pro	Leu	Glu	Lys	Leu	Asn	His	Phe	Phe	Glu	Gly	Val	195	200	205	
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 ggctgagtgt ggcttccccg gaagacctca ctgaccccag agtggcagaa aggctgatgc
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 1320
 tcaggagagg ctaacggaca tcagctgcag ccaggcatgt cccgtatgcc aaaagagggt
 1380
 gctgccccta gcctgggccc ccaccgacag actgcagctg cgttactgtg ctgagaggta
 1440
 cccagaaggt tcccatgaag ggcagcatgt ccaagcccct gaccccagat gtggcaacag
 1500
 gaccctcgct cacatccacc ggagtgtatg tgtggggagg ggcttcacct gttcccagag
 1560
 gtgtccttgg actcaccttg gcacatgttc tgtgtttcag taaagagaga cctgatcacc
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 1676

<210> 2856
 <211> 401
 <212> PRT
 <213> Homo sapiens

<400> 2856
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 20 25 30
 Gln Thr Ile Thr Gly Ser Asp Pro Glu Glu Ala Ile Phe Asp Thr Leu
 35 40 45
 Cys Thr Asp Asp Ser Ser Glu Glu Ala Lys Thr Leu Thr Met Asp Ile
 50 55 60
 Leu Thr Leu Ala His Thr Ser Thr Glu Ala Lys Gly Leu Ser Ser Glu
 65 70 75 80
 Ser Ser Ala Ser Ser Asp Gly Pro His Pro Val Ile Thr Pro Ser Arg
 85 90 95
 Ala Ser Glu Ser Ser Ala Ser Ser Asp Gly Pro His Pro Val Ile Thr
 100 105 110
 Pro Ser Arg Ala Ser Glu Ser Ser Ala Ser Ser Asp Gly Pro His Pro
 115 120 125
 Val Ile Thr Pro Ser Trp Ser Pro Gly Ser Asp Val Thr Leu Leu Ala
 130 135 140
 Glu Ala Leu Val Thr Val Thr Asn Ile Glu Val Ile Asn Cys Ser Ile
 145 150 155 160
 Thr Glu Ile Glu Thr Thr Thr Ser Ser Ile Pro Gly Ala Ser Asp Thr

				165				170					175				
Asp	Leu	Ile	Pro	Thr	Glu	Gly	Val	Lys	Ala	Ser	Ser	Thr	Ser	Asp	Pro		
			180					185					190				
Pro	Ala	Leu	Pro	Asp	Ser	Xaa	Leu	Lys	Gln	Asn	His	Thr	Ser	Leu	Arg		
		195					200						205				
Ser	Xaa	Ala	Ser	Ala	Glu	Thr	Leu	Ser	Thr	Ala	Gly	Thr	Thr	Glu	Ser		
	210					215					220						
Ala	Ala	Pro	Asp	Ala	Thr	Val	Gly	Thr	Pro	Leu	Pro	Thr	Asn	Ser	Thr		
225					230					235					240		
Ile	Glu	Arg	Glu	Val	Thr	Ala	Pro	Arg	Ala	Thr	Thr	Leu	Ser	Gly	Ala		
			245						250					255			
Leu	Val	Thr	Val	Ser	Arg	Asn	Pro	Leu	Glu	Glu	Thr	Ser	Ala	Leu	Ser		
			260					265					270				
Val	Glu	Thr	Pro	Ser	Tyr	Val	Lys	Val	Ser	Gly	Ala	Ala	Pro	Val	Ser		
	275						280					285					
Ile	Glu	Ala	Gly	Ser	Ala	Val	Gly	Lys	Thr	Thr	Ser	Phe	Ala	Gly	Ser		
	290					295					300						
Ser	Ala	Ser	Ser	Tyr	Ser	Pro	Ser	Glu	Ala	Ala	Leu	Lys	Asn	Phe	Thr		
305					310				315					320			
Pro	Ser	Glu	Thr	Pro	Thr	Met	Asp	Ile	Ala	Thr	Lys	Gly	Pro	Phe	Pro		
			325						330					335			
Thr	Ser	Arg	Asp	Pro	Leu	Pro	Ser	Val	Pro	Pro	Thr	Thr	Thr	Asn	Ser		
			340					345					350				
Ser	Arg	Gly	Thr	Asn	Ser	Thr	Leu	Ala	Lys	Ile	Thr	Thr	Ser	Ala	Lys		
	355						360					365					
Thr	Thr	Met	Lys	Pro	Pro	Thr	Ala	Thr	Pro	Thr	Thr	Ala	Arg	Thr	Arg		
	370					375					380						
Pro	Thr	Thr	Asp	Val	Ser	Ala	Gly	Glu	Asn	Gly	Gly	Ser	Ser	Ser	Cys		
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Gly																	

<210> 2857
 <211> 1668
 <212> DNA
 <213> Homo sapiens

<400> 2857
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 aggctagcca gagggtaatt acacaggtgt aggccggcgg ggcgggaggga gggctcggga
 180
 ggccgagggg actggaagag ttggctgcgc ccaggcacca ggtggaagaa tttccatacc
 240
 agccctgcgg aggtgcctct gtttccagag gcgtttttgt acgaaggga ttttgaaagc
 300
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 360
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 420
 attttgaata tgatgcagag gagttcttgg tctctttggc cttgctgata acagaaggac
 480

gaacacctga atgttctgta aaaggctgaa cagaaagctt tcattgccct ccagcacagt
 540
 cttgttacc agtaactacc aaacatgaat gtagtgacaa gctggcccag tgccgccaag
 600
 ccagacgaac taggtctgag gtcacattgt tgtggaagaa taaccttcca atcatggtgg
 660
 aaatgatgct actaccagac tgctgctaca gcgatgatgg gccaccaca gaggggaattg
 720
 atctaaatga tcctgcgatt aagcaagatg cattattatt agaaagatgg atcttgagc
 780
 cagttcctcg acagaatggg gaccgattta ttgaagagaa gacgcttctg ttggctgtcc
 840
 gctcatttgt gtttttttct cagttaagtg catggctgag tgtttctcat ggtgctattc
 900
 cagcaaata tctctacaga atcagtgtg ctgatgtaga cctacagtgg aatttttcac
 960
 agactccaat tgagcatgtg tttcctgttc ccaatgttcc tcacaatgtt gccttgaaag
 1020
 tcagtggtea atccctggcc caaacaatct aattatccag ttttgacgtg cagtattcac
 1080
 actaatattg gcctttatga gaaaagaatt caacaacata aacttaaaac tcatcagcac
 1140
 cataacccaa atgaagcaga acaatgtggg acaaacagtt cacagcgtct gtgtagcaaa
 1200
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 1260
 tatactgcag ctgtcaaaaa tatcaaacta tatccaggca ctggcagtaa atctgaccat
 1320
 gggacatctc aagccaatat tctaggcttt agtggtatag gtgatataaa atcacaagaa
 1380
 acatcagtga gaactttaaa atcattttca atggttgatt ccagtatctc taaccgccag
 1440
 agtttctggc agtcagctgg tgagactaac cctttaatag gctctttaat tcaggagcgg
 1500
 caagaaatca ttgcaagaat tgctcaacat ttgattcatt gtgatccaag cacttcacat
 1560
 gtttctggac gtcattttaa tactcaagag tctagttcac tccattcaaa acttttccgg
 1620
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 1668

<210> 2858

<211> 220

<212> PRT

<213> Homo sapiens

<400> 2858

Met	Lys	Pro	Asp	Arg	Asp	Thr	Leu	Asp	Glu	Tyr	Phe	Glu	Tyr	Asp	Ala
1				5					10					15	
Glu	Glu	Phe	Leu	Val	Ser	Leu	Ala	Leu	Leu	Ile	Thr	Glu	Gly	Arg	Thr
			20					25					30		
Pro	Glu	Cys	Ser	Val	Lys	Gly	Arg	Thr	Glu	Ser	Phe	His	Cys	Pro	Pro
	35					40					45				
Ala	Gln	Ser	Cys	Tyr	Pro	Val	Thr	Thr	Lys	His	Glu	Cys	Ser	Asp	Lys

50	55	60
Leu Ala Gln Cys Arg Gln Ala Arg Arg Thr Arg Ser Glu Val Thr Leu		
65	70	75
Leu Trp Lys Asn Asn Leu Pro Ile Met Val Glu Met Met Leu Leu Pro		80
	85	90
Asp Cys Cys Tyr Ser Asp Asp Gly Pro Thr Thr Glu Gly Ile Asp Leu		95
	100	105
Asn Asp Pro Ala Ile Lys Gln Asp Ala Leu Leu Leu Glu Arg Trp Ile		110
	115	120
Leu Glu Pro Val Pro Arg Gln Asn Gly Asp Arg Phe Ile Glu Glu Lys		125
	130	135
Thr Leu Leu Leu Ala Val Arg Ser Phe Val Phe Phe Ser Gln Leu Ser		140
	145	150
Ala Trp Leu Ser Val Ser His Gly Ala Ile Pro Arg Asn Ile Leu Tyr		155
	160	165
Arg Ile Ser Ala Ala Asp Val Asp Leu Gln Trp Asn Phe Ser Gln Thr		170
	175	180
Pro Ile Glu His Val Phe Pro Val Pro Asn Val Ser His Asn Val Ala		185
	190	195
Leu Lys Val Ser Gly Gln Ser Leu Ala Gln Thr Ile		200
	205	210
	215	220

<210> 2859

<211> 1029

<212> DNA

<213> Homo sapiens

<400> 2859

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120
caccggcaa tgttcctctc aaggggcagc ggtagtggca gcgcctctgc tctcaatgca
180
gcaggtaccg gcgtcggtag taatgccaca tcttcgaggg attttccgcc tccgtcgctg
240
cttcagccgc cgcctcctgc agcatcttct acgtcgggac cacagcctcc gcctccacaa
300
agcctgaacc tcctttcgca ggctcagctg caggcacagc ctcttgccgc aggcggaact
360
caaatgaaaa agaaaagtgg ctccagata actagcgta ctctgctca gatctccgct
420
agtatcagct ctaacaacag tatagcagag gacactgaga gctatgatga tctggatgaa
480
tctcacacgg aagatctctc ttcttcggag atccttgatg tgtcactttc cagggtact
540
gacttagggg agcccgaacg cagctcctca gaagagacce taaataactt ccaggaagcc
600
gagacacctg gggcagtctc tcccaaccag cccaccttc ctcagcctca tttgcctcac
660
cttcacacac agaattgtgt gatcaatggg aatgctcatc cacaccacct ccatcaccac
720
catcagattc atcatgggca ccacctccaa catggtcacc accatccatc tcatgttgct
780

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gtggccagtg catccattac tgggtgggcca ccctcaagcc cagtatctag aaaactctct
 840
 acaactggaa gctctgacag tatcacacca gttgcaccaa cttctgctgt atcatccagt
 900
 ggttcacctg catctgtaat gactaatatg cgtgctccaa gtactacagg tggaataggc
 960
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 1020
 tttaattcc
 1029

<210> 2860
 <211> 343
 <212> PRT
 <213> Homo sapiens

<400> 2860
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 Thr Met His Gln Pro Pro Glu Ser Thr Ala Ala Ala Ala Ala Ala Ala
 20 25 30
 Asp Ile Ser Ala Arg Lys Met Ala His Pro Ala Met Phe Pro Arg Arg
 35 40 45
 Gly Ser Gly Ser Gly Ser Ala Ser Ala Leu Asn Ala Ala Gly Thr Gly
 50 55 60
 Val Gly Ser Asn Ala Thr Ser Ser Glu Asp Phe Pro Pro Pro Ser Leu
 65 70 75 80
 Leu Gln Pro Pro Pro Pro Ala Ala Ser Ser Thr Ser Gly Pro Gln Pro
 85 90 95
 Pro Pro Pro Gln Ser Leu Asn Leu Leu Ser Gln Ala Gln Leu Gln Ala
 100 105 110
 Gln Pro Leu Ala Pro Gly Gly Thr Gln Met Lys Lys Lys Ser Gly Phe
 115 120 125
 Gln Ile Thr Ser Val Thr Pro Ala Gln Ile Ser Ala Ser Ile Ser Ser
 130 135 140
 Asn Asn Ser Ile Ala Glu Asp Thr Glu Ser Tyr Asp Asp Leu Asp Glu
 145 150 155 160
 Ser His Thr Glu Asp Leu Ser Ser Ser Glu Ile Leu Asp Val Ser Leu
 165 170 175
 Ser Arg Ala Thr Asp Leu Gly Glu Pro Glu Arg Ser Ser Ser Glu Glu
 180 185 190
 Thr Leu Asn Asn Phe Gln Glu Ala Glu Thr Pro Gly Ala Val Ser Pro
 195 200 205
 Asn Gln Pro His Leu Pro Gln Pro His Leu Pro His Leu Pro Gln Gln
 210 215 220
 Asn Val Val Ile Asn Gly Asn Ala His Pro His His Leu His His His
 225 230 235 240
 His Gln Ile His His Gly His His Leu Gln His Gly His His His Pro
 245 250 255
 Ser His Val Ala Val Ala Ser Ala Ser Ile Thr Gly Gly Pro Pro Ser
 260 265 270
 Ser Pro Val Ser Arg Lys Leu Ser Thr Thr Gly Ser Ser Asp Ser Ile
 275 280 285
 Thr Pro Val Ala Pro Thr Ser Ala Val Ser Ser Ser Gly Ser Pro Ala


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      290              295              300
Ser Val Met Thr Asn Met Arg Ala Pro Ser Thr Thr Gly Gly Ile Gly
305              310              315              320
Ile Asn Ser Val Thr Gly Thr Ser Thr Val Asn Asn Val Asn Ile Thr
      325              330              335
Ala Val Gly Ser Phe Asn Ser
      340

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<210> 2861
 <211> 756
 <212> DNA
 <213> Homo sapiens

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<400> 2861
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gacctttctt tccattcacc ttcactggat cttgtttctg aagcttttagc ggttatcaac
120
aatgggaaca agggccctcc agttggctca aggataagca tgccaaccac aaagcctcgt
180
ccaggactga gagaagaaaa attagcaagt atcatgagta agctgccact agctactccc
240
aaaaaactag attctactca gactacacat tcttcaagtc ttattgctgg tcacacaggg
300
ccagtaccaa agaaacccca ggatttagct catactggca tctcttcagg ccttattgct
360
ggttcttcca ttcagaaccc taaagtttct ttagaacctt tgccagccag gctacttcaa
420
caaggacttc agaggtcaag ccagattcac acttcttctt cttcacagac ccatgtctcc
480
tcttcttccc aagcccaa at tgctgectct tctcatgctc tgggaacatc cgaggcccaa
540
gatgcttctt cgtaaacaca agtaacaaag gtgcaccagc attcagctgt ccagcagaac
600
tatgtgtctc cattacaggc caccatcagt aaatcccaga ccaaccccg t cgtgaagtta
660
agtaataatc cccaactctc ctgttctctc tcacttatta agacttcaga taagccactt
720
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756

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<210> 2862
 <211> 252
 <212> PRT
 <213> Homo sapiens

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<400> 2862
Ala Ser Ser Ser Ser Ala Pro Ala Gln Glu Thr Ile Cys Leu Asp Asp
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Ser Leu Asp Glu Asp Leu Ser Phe His Ser Pro Ser Leu Asp Leu Val
20          25          30
Ser Glu Ala Leu Ala Val Ile Asn Asn Gly Asn Lys Gly Pro Pro Val
35          40          45
Gly Ser Arg Ile Ser Met Pro Thr Thr Lys Pro Arg Pro Gly Leu Arg

```

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      50      55      60
Glu Glu Lys Leu Ala Ser Ile Met Ser Lys Leu Pro Leu Ala Thr Pro
65      70      75      80
Lys Lys Leu Asp Ser Thr Gln Thr Thr His Ser Ser Ser Leu Ile Ala
      85      90      95
Gly His Thr Gly Pro Val Pro Lys Lys Pro Gln Asp Leu Ala His Thr
      100      105      110
Gly Ile Ser Ser Gly Leu Ile Ala Gly Ser Ser Ile Gln Asn Pro Lys
      115      120      125
Val Ser Leu Glu Pro Leu Pro Ala Arg Leu Leu Gln Gln Gly Leu Gln
      130      135      140
Arg Ser Ser Gln Ile His Thr Ser Ser Ser Ser Gln Thr His Val Ser
145      150      155      160
Ser Ser Ser Gln Ala Gln Ile Ala Ala Ser Ser His Ala Leu Gly Thr
      165      170      175
Ser Glu Ala Gln Asp Ala Ser Ser Leu Thr Gln Val Thr Lys Val His
      180      185      190
Gln His Ser Ala Val Gln Gln Asn Tyr Val Ser Pro Leu Gln Ala Thr
      195      200      205
Ile Ser Lys Ser Gln Thr Asn Pro Val Val Lys Leu Ser Asn Asn Pro
      210      215      220
Gln Leu Ser Cys Ser Ser Ser Leu Ile Lys Thr Ser Asp Lys Pro Leu
225      230      235      240
Met Tyr Arg Leu Pro Leu Ser Thr Pro Phe Thr Arg
      245      250

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<210> 2863

<211> 711

<212> DNA

<213> Homo sapiens

<400> 2863

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120
gccgtgcccc gaatcccagt cagaagttcc agcctgccac tggtctctga tgccatgcca
180
gcaccaactc aactgttttt tctctcatc cgtaactgtg aactgagcag gatctatggc
240
actgcatgtt actgccacca caaacatctc tggtgttctt catcgtagat tctcagagt
300
cgactgagat acacacctca tccagcatat gctacctttt gcaggccaaa ggagaactgg
360
tggcagtaca cccaaggaag gagatatgct tccacaccac agaaatttta cctcacacct
420
ccacaagtca atagcatcct taaagcta atgaacagtt tcaaagtgcc agaatttgac
480
ggcaaaaatg tcagttctat ccttggtatt gacagcaatc agctgcctgc aaatgcaccc
540
attgaggacc ggagaagtgc agcaacctgc ttgcagacca gagggatgct tttgggggtt
600
tttgatggcc atgcagggtg tgcttgttcc caggcagtca gtgaaagact cttttattat
660

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attgctgtct ctttggtacc ccatgagact ttgctagaga ttgaaaatgc a
711

<210> 2864

<211> 237

<212> PRT

<213> Homo sapiens

<400> 2864

Xaa	Arg	Arg	Arg	Ile	Ser	Met	Gln	Arg	Ala	Pro	Gly	Ala	Ala	Arg	Xaa
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Cys	Val	Glu	Arg	Ala	Pro	Ser	Gly	Gly	Val	Val	Val	Ala	Pro	Ser	Ser
			20					25					30		
Ser	Gly	Arg	Ile	Val	Trp	Ser	Pro	Ala	Val	Pro	Gly	Ile	Pro	Val	Arg
			35				40					45			
Ser	Ser	Ser	Leu	Pro	Leu	Phe	Ser	Asp	Ala	Met	Pro	Ala	Pro	Thr	Gln
			50			55					60				
Leu	Phe	Phe	Pro	Leu	Ile	Arg	Asn	Cys	Glu	Leu	Ser	Arg	Ile	Tyr	Gly
65					70					75					80
Thr	Ala	Cys	Tyr	Cys	His	His	Lys	His	Leu	Cys	Cys	Ser	Ser	Ser	Tyr
				85					90					95	
Ile	Pro	Gln	Ser	Arg	Leu	Arg	Tyr	Thr	Pro	His	Pro	Ala	Tyr	Ala	Thr
			100					105						110	
Phe	Cys	Arg	Pro	Lys	Glu	Asn	Trp	Trp	Gln	Tyr	Thr	Gln	Gly	Arg	Arg
			115				120						125		
Tyr	Ala	Ser	Thr	Pro	Gln	Lys	Phe	Tyr	Leu	Thr	Pro	Pro	Gln	Val	Asn
			130			135					140				
Ser	Ile	Leu	Lys	Ala	Asn	Glu	Tyr	Ser	Phe	Lys	Val	Pro	Glu	Phe	Asp
145					150					155					160
Gly	Lys	Asn	Val	Ser	Ser	Ile	Leu	Gly	Phe	Asp	Ser	Asn	Gln	Leu	Pro
			165					170						175	
Ala	Asn	Ala	Pro	Ile	Glu	Asp	Arg	Arg	Ser	Ala	Ala	Thr	Cys	Leu	Gln
			180					185						190	
Thr	Arg	Gly	Met	Leu	Leu	Gly	Val	Phe	Asp	Gly	His	Ala	Gly	Cys	Ala
			195				200						205		
Cys	Ser	Gln	Ala	Val	Ser	Glu	Arg	Leu	Phe	Tyr	Tyr	Ile	Ala	Val	Ser
			210			215					220				
Leu	Leu	Pro	His	Glu	Thr	Leu	Leu	Glu	Ile	Glu	Asn	Ala			
225					230						235				

<210> 2865

<211> 585

<212> DNA

<213> Homo sapiens

<400> 2865

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agaagtagta gaagacaaag acagttcttt aaattcttga gaagtatgag ctctgtgtat
120
ctgcagtgta aagttttgat atgtgatagc agtgaccacc agtctcgctg caatcaaggt
180
tgtgtctcca gaagcaaacg agacatttct tcatataaat ggaaaacaga ttccatcata
240

ggacccattc gtctgaaaag ggatcgaagt gcaagtggca attcaggatt tcagcatgaa
 300
 acacatgcgg aagaaactcc aaaccagcct ttcaacagtg tgcattctgtt ttccttcatg
 360
 gttctagctc tgaatgtggt gactgtagcg acaatcacag tgaggcattt tgtaaataca
 420
 cgggcagact acaaatacca gaagctgcag aactattaac taacagggtcc aaccctaagt
 480
 gagacatggt tctccaggat gccaaaggaa atgctacctc gtggctacac atattatgaa
 540
 taaatgagga agggcctgaa agtggcacac aggcctgcaa aaaaa
 585

<210> 2866
 <211> 134
 <212> PRT
 <213> Homo sapiens

<400> 2866
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 1 5 10 15
 Ser Met Ser Ser Val Tyr Leu Gln Cys Lys Val Leu Ile Cys Asp Ser
 20 25 30
 Ser Asp His Gln Ser Arg Cys Asn Gln Gly Cys Val Ser Arg Ser Lys
 35 40 45
 Arg Asp Ile Ser Ser Tyr Lys Trp Lys Thr Asp Ser Ile Ile Gly Pro
 50 55 60
 Ile Arg Leu Lys Arg Asp Arg Ser Ala Ser Gly Asn Ser Gly Phe Gln
 65 70 75 80
 His Glu Thr His Ala Glu Glu Thr Pro Asn Gln Pro Phe Asn Ser Val
 85 90 95
 His Leu Phe Ser Phe Met Val Leu Ala Leu Asn Val Val Thr Val Ala
 100 105 110
 Thr Ile Thr Val Arg His Phe Val Asn Gln Arg Ala Asp Tyr Lys Tyr
 115 120 125
 Gln Lys Leu Gln Asn Tyr
 130

<210> 2867
 <211> 444
 <212> DNA
 <213> Homo sapiens

<400> 2867
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 120
 cagaaggatga ctctgaaggt gtcgccacgg ggaattatcc ttcattcagg ccatcatcca
 180
 gctcccagac aacactgctg ccactcaagg cttgtggccg cggcacctcg tccatgttgg
 240
 tgggtgttggc gctgaccgtg gacagcgggg ccttagccgt ctctctaag tccagcaggt
 300

tcccagtggc gaccaagctc ttcaaggggg ggggtgcagtc ttggcggggc cccaggacgt
 360
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 420
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 444

<210> 2868

<211> 84

<212> PRT

<213> Homo sapiens

<400> 2868

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Lys	Gly	Glu	Glu	Leu	Ser	Ala	Ala	Ala	Ile	Lys	Arg	Ile	Val	Ala	Thr
			20					25					30		
Ala	Lys	Ala	Ser	Gly	Lys	Lys	Leu	Gln	Lys	Val	Thr	Leu	Lys	Val	Ser
		35					40					45			
Pro	Arg	Gly	Ile	Ile	Leu	His	Pro	Gly	His	His	Pro	Ala	Pro	Arg	Gln
	50					55					60				
His	Cys	Cys	His	Ser	Arg	Leu	Val	Ala	Ala	Ala	Pro	Arg	Pro	Cys	Trp
65					70				75					80	
Trp	Cys	Trp	Arg												

<210> 2869

<211> 5811

<212> DNA

<213> Homo sapiens

<400> 2869

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 120
 cccccaaggc cactcacctc cccaactac ccaggacaaa ggatgcccag ccaaccacgc
 180
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<212> PRT

<213> Homo sapiens

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<211> 786

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<213> Homo sapiens

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Met Val Ala Met Val Glu Val Gln Leu Asp Ala Asp His Asp Tyr Pro
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Pro Gly Leu Leu Ile Ala Phe Ser Ala Cys Thr Thr Val Leu Val Ala
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Gly His Leu Phe Ala Leu Met Ile Ser Thr Cys Ile Leu Pro Asn Ile
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Glu Ala Val Ser Asn Cys Thr Ile Ser Thr Arg Lys Glu Ser Pro His
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Glu Arg Met His Arg His Ile Glu Leu Ala Trp Ala Phe Ser Thr Val
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<210> 2878
 <211> 451
 <212> PRT
 <213> Homo sapiens

<400> 2878
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 Ala Tyr Met Phe Trp Trp Leu Tyr Tyr Ala Thr Thr Pro Ala Arg Thr
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 165 170 175
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 Ala Gly Val Ala Leu Gly Asp Ser Trp Ile Ser Pro Val Asp Ser Val
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 Asn Lys Gly Leu Tyr Arg Glu Ala Thr Glu Leu Trp Gly Lys Ala Glu
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Leu Lys Trp Pro Glu Leu Ser Arg Phe Asn Gln Leu Lys Trp Lys Ala
385          390          395          400
Leu Tyr Ser Asp Pro Lys Ser Leu Glu Thr Ser Ala Phe Val Lys Ser
          405          410          415
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<212> DNA

<213> Homo sapiens

<400> 2879

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<210> 2880

<211> 376

<212> PRT

<213> Homo sapiens

<400> 2880

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<210> 2881

<211> 3021

<212> DNA

<213> Homo sapiens

<400> 2881

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 <211> 96
 <212> PRT
 <213> Homo sapiens

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 Pro Ala Ile Ser Pro Leu Pro Thr Asp Ser Gln Ser Pro Leu Ala Ser
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 <211> 516
 <212> DNA
 <213> Homo sapiens

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<213> Homo sapiens

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Leu	Ser	Pro	Pro	Pro	Glu	His	Pro	Gly	Phe	Asp	Ala	Leu	Asp	Gln	Leu
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<210> 2885

<211> 807

<212> DNA

<213> Homo sapiens

<400> 2885

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<210> 2886

<211> 269

<212> PRT

<213> Homo sapiens

<400> 2886

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		35					40					45			
Phe	Leu	Lys	Lys	Leu	Glu	Ala	Leu	Ile	Ala	Ser	Asn	Asp	Asn	Ala	Asn
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Lys	Thr	Cys	Lys	Met	Met	Leu	Ala	Thr	Glu	Glu	Thr	Ser	Pro	Asp	Leu
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Val	Gly	Ile	Lys	Arg	Asp	Leu	Glu	Ala	Leu	Ser	Lys	Gln	Cys	Asn	Lys
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Leu	Leu	Asp	Arg	Ala	Gln	Ala	Arg	Glu	Glu	Gln	Val	Glu	Gly	Thr	Ile
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Lys	Arg	Leu	Glu	Glu	Phe	Tyr	Ser	Lys	Leu	Lys	Glu	Phe	Ser	Ile	Leu
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Gly	Leu	Glu	His	Asp	Leu	Asp	Asp	Val	Asn	Ala	Arg	Trp	Lys	Thr	Leu
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<210> 2887

<211> 1945

<212> DNA

<213> Homo sapiens

<400> 2887

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<210> 2888

<211> 315

<212> PRT

<213> Homo sapiens

<400> 2888

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			20					25					30		
Thr	Arg	Ser	Met	Leu	Lys	Met	Thr	Thr	Ser	Ile	Asn	Arg	Arg	Ser	Arg
			35				40					45			
Thr	Ser	Thr	Lys	Ser	Thr	Arg	Thr	Ser	Ala	Arg	Pro	Gly	Leu	Thr	Ala
			50			55				60					
Thr	Val	Ser	Ile	Gly	Leu	Ser	Asp	Ser	Pro	Thr	Trp	Arg	His	Cys	Trp
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Met	Thr	Ala	Arg	Ser	Cys	Ser	Gly	Glu	Lys	Gly	Gly	His	Trp	Ala	Pro
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Arg	Gln	Val	Gly	Val	Tyr	Leu	Leu	Pro	Gly	Arg	Val	Gly	Cys	Val	Ser
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Ser	Arg	Val	Ser	Pro	Ser	Phe	Pro	Gly	Asp	Gly	Leu	Asp	Ser	Gly	Leu
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Ala	Arg	Arg	Gly	Ser	Ala	Val	Ser	Ala	Leu	Ala	Ser	Gly	Leu	Val	Glu
			130			135					140				
Glu	Pro	Met	Leu	Gly	Pro	Pro	Phe	His	Pro	Thr	Pro	Arg	Phe	Lys	Ala
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Val	Ser	Ala	Lys	Ser	Lys	Glu	Asp	Leu	Val	Ser	Gln	Gly	Phe	Thr	Glu
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<212> DNA
<213> Homo sapiens
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<211> 204
<212> PRT
<213> Homo sapiens
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2123

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      35           40           45
Lys Ala Glu Gln Ala Glu Gly Met Glu Phe Gly Phe Lys Met Pro Lys
      50           55           60
Met Thr Met Pro Lys Leu Gly Arg Ala Glu Ser Pro Ser Arg Gly Lys
65           70           75           80
Pro Gly Glu Ala Gly Ala Glu Val Ser Gly Lys Leu Val Thr Leu Pro
      85           90           95
Cys Leu Gln Pro Glu Val Asp Gly Glu Ala His Val Gly Val Pro Ser
      100          105          110
Leu Thr Leu Pro Ser Val Glu Leu Asp Leu Pro Gly Ala Leu Gly Leu
      115          120          125
Gln Gly Gln Val Pro Ala Ala Lys Met Gly Lys Gly Glu Arg Ala Glu
      130          135          140
Gly Pro Glu Val Ala Ala Gly Val Arg Glu Val Gly Phe Arg Val Pro
145          150          155          160
Ser Val Glu Ile Val Thr Pro Gln Leu Pro Ala Val Glu Ile Glu Glu
      165          170          175
Gly Arg Leu Glu Met Ile Glu Thr Lys Val Lys Pro Ser Ser Lys Phe
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Ser Leu Pro Lys Phe Gly Leu Ser Gly Pro Lys Val
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<210> 2891
 <211> 565
 <212> DNA
 <213> Homo sapiens

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<210> 2892

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900

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<210> 2894

<211> 490

<212> PRT

<213> Homo sapiens

<400> 2894

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Gln Val Ser Val Ser Leu His Pro Gly Thr Gly Leu Phe Ser Pro Phe			
	35	40	45
Cys Ser Val Pro Leu Trp Cys Ile Tyr Phe Leu Ser Phe Cys Ile Val			
	50	55	60
Leu Ser Leu Pro Ser Ala Ser Leu His Leu Cys Leu Ser Cys Leu His			
	65	70	75
Phe Leu Asn Leu Asp Cys Pro Cys Leu Phe Leu Cys His Ser Leu Ser			
	85	90	95
Ser Pro Ser Val Cys Gly Ser Ala Ser Leu Ser His Ser Pro Tyr Asn			
	100	105	110
Trp Pro Leu Pro Ala Gln Thr Phe Leu Asp Glu Leu His Glu Thr Gly			
	115	120	125
Gln Leu His Ser Met Ser Thr Trp Met Glu Leu Tyr Pro Ala Val Ser			
	130	135	140
Thr Asp Val Arg Phe Ala Asn Met Leu Gly Gln Pro Gly Ser Thr Pro			
	145	150	155
Leu Asp Leu Phe Lys Phe Tyr Val Glu Glu Leu Lys Ala Arg Phe His			
	165	170	175
Asp Glu Lys Lys Ile Ile Lys Asp Ile Leu Lys Asp Arg Gly Phe Cys			
	180	185	190
Val Glu Val Asn Thr Ala Phe Glu Asp Phe Ala His Val Ile Ser Phe			
	195	200	205
Asp Lys Arg Ala Ala Ala Leu Asp Ala Gly Asn Ile Lys Leu Thr Phe			
	210	215	220
Asn Ser Leu Leu Glu Lys Ala Glu Ala Arg Glu Arg Glu Arg Glu Lys			
	225	230	235
Glu Glu Ala Arg Arg Met Arg Arg Arg Glu Ala Ala Phe Arg Ser Met			
	245	250	255
Leu Arg Gln Ala Val Pro Ala Leu Glu Leu Gly Thr Ala Trp Glu Glu			
	260	265	270
Val Arg Glu Arg Phe Val Cys Asp Ser Ala Phe Glu Gln Ile Thr Leu			
	275	280	285
Glu Ser Glu Arg Ile Arg Leu Phe Arg Glu Phe Leu Gln Val Leu Glu			
	290	295	300
Thr Glu Cys Gln His Leu His Thr Lys Gly Arg Lys His Gly Arg Lys			
	305	310	315
Gly Lys Lys His His His Lys Arg Ser His Ser Pro Ser Gly Ser Glu			
	325	330	335
Ser Glu Glu Glu Glu Leu Pro Pro Pro Ser Leu Arg Pro Pro Lys Arg			
	340	345	350
Arg Arg Arg Asn Pro Ser Glu Ser Gly Ser Glu Pro Ser Ser Ser Leu			
	355	360	365
Asp Ser Val Glu Ser Gly Gly Ala Ala Leu Gly Gly Arg Gly Ser Pro			
	370	375	380
Ser Ser His Leu Leu Gly Ala Asp His Gly Leu Arg Lys Ala Lys Lys			
	385	390	395
Pro Lys Lys Lys Thr Lys Lys Arg Arg His Lys Ser Asn Ser Pro Glu			
	405	410	415
Ser Glu Thr Asp Pro Glu Glu Lys Ala Gly Lys Glu Ser Asp Glu Lys			
	420	425	430
Glu Gln Glu Gln Asp Lys Asp Arg Glu Leu Gln Gln Ala Glu Leu Pro			

435 440 445
 Asn Arg Ser Pro Gly Phe Gly Ile Lys Lys Glu Lys Thr Gly Trp Asp
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<210> 2895
 <211> 697
 <212> DNA
 <213> Homo sapiens

<400> 2895
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<210> 2896
 <211> 174
 <212> PRT
 <213> Homo sapiens

<400> 2896
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 35 40 45
 Pro Gln Gly Leu Gln Lys Gly Gly Gly Glu Ala Pro Val Leu Leu Leu
 50 55 60
 Gln Glu Leu Ala Gln Asp Ala Val Ala Pro Ala Val Ala Arg Arg Ser

65		70		75		80									
Ala	Pro	Ala	Pro	Cys	Ser	Asn	Arg	Leu	Arg	Ser	Pro	Ser	Pro	Pro	Ser
				85					90					95	
Leu	Pro	Pro	Asp	Arg	Pro	Arg	Pro	Pro	Ala	Arg	Arg	His	Ser	Phe	Arg
			100					105					110		
Gly	Pro	Ala	Leu	Arg	Ser	Gly	Pro	Pro	Leu	Pro	Pro	Pro	Pro	Arg	Arg
		115					120					125			
Pro	Leu	Leu	Arg	Pro	Pro	Val	Ala	Ala	Ala	Leu	Pro	Pro	Gln	Pro	Ala
		130				135					140				
Pro	Ser	Leu	Pro	Ala	Ser	Arg	Ala	His	Ser	Cys	Pro	Gly	Arg	Pro	Arg
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Leu	Gly	Gly	Val	Glu	Gln	Pro	Leu	Glu	Val	Leu	Gly	Asp	Ala		
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<210> 2897

<211> 3184

<212> DNA

<213> Homo sapiens

<400> 2897

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<210> 2898

<211> 933

<212> PRT

<213> Homo sapiens

<400> 2898

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			20					25					30		
Asn	Glu	Cys	Val	Gln	Cys	Glu	Phe	Asn	Phe	Ile	Asn	Thr	Gly	Lys	Phe
		35					40					45			
Thr	Phe	Ser	Phe	Gln	Ala	Gln	Leu	Cys	Gly	Ser	Lys	Thr	Leu	Leu	Gln
	50					55					60				
Tyr	Leu	Glu	Phe	Ser	Pro	Ile	Asp	Ser	Thr	Val	Asp	Val	Gly	Gln	Ser
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Val	His	Ala	Thr	Leu	Ser	Phe	Gln	Pro	Leu	Lys	Lys	Cys	Val	Leu	Thr
			85					90					95		
Asp	Leu	Glu	Leu	Ile	Ile	Lys	Ile	Ser	His	Gly	Pro	Thr	Phe	Met	Cys
			100					105					110		
Asn	Ile	Ser	Gly	Cys	Ala	Val	Ser	Pro	Ala	Ile	His	Phe	Ser	Phe	Thr
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Ser	Tyr	Asn	Phe	Gly	Thr	Cys	Phe	Ile	Tyr	Gln	Ala	Gly	Met	Pro	Pro
		130				135					140				
Tyr	Lys	Gln	Thr	Leu	Val	Ile	Thr	Asn	Lys	Glu	Glu	Thr	Pro	Met	Ser
145					150					155				160	
Ile	Asp	Cys	Leu	Tyr	Thr	Asn	Thr	Thr	His	Leu	Glu	Val	Asn	Ser	Arg
			165					170					175		
Val	Asp	Val	Val	Lys	Pro	Gly	Asn	Thr	Leu	Glu	Ile	Pro	Ile	Thr	Phe
			180					185					190		
Tyr	Pro	Arg	Glu	Ser	Ile	Asn	Tyr	Gln	Glu	Leu	Ile	Pro	Phe	Glu	Ile
		195				200						205			
Asn	Gly	Leu	Ser	Gln	Gln	Thr	Val	Glu	Ile	Lys	Gly	Lys	Gly	Thr	Glu

210	215	220
Met Lys Ile Leu Val	Leu Asp Pro Ala Asn Arg	Ile Val Lys Leu Gly
225	230	235
Ala Val Leu Pro Gly	Gln Val Val Lys Arg Thr	Val Ser Ile Met Asn
245	250	255
Asn Ser Leu Ala Gln	Leu Thr Phe Asn Gln Ser	Ile Leu Phe Thr Ile
260	265	270
Pro Glu Leu Gln Glu	Pro Lys Val Leu Thr	Leu Ala Pro Phe His Asn
275	280	285
Ile Thr Leu Lys Pro	Lys Glu Val Cys Lys	Leu Glu Val Ile Phe Ala
290	295	300
Pro Lys Lys Arg Val	Pro Pro Phe Ser Glu	Glu Val Phe Met Glu Cys
305	310	315
Met Gly Leu Leu Arg	Pro Leu Phe Leu Leu	Ser Gly Cys Cys Gln Ala
325	330	335
Leu Glu Ile Ser Leu	Asp Gln Glu His Ile	Pro Phe Gly Pro Val Val
340	345	350
Tyr Gln Thr Gln Ala	Thr Arg Arg Ile Leu	Met Leu Asn Thr Gly Asp
355	360	365
Val Gly Ala Arg Phe	Lys Trp Asp Ile Lys	Lys Phe Glu Pro His Phe
370	375	380
Ser Ile Ser Pro Glu	Glu Gly Tyr Ile Thr	Ser Gly Met Glu Val Ser
385	390	395
Phe Glu Val Thr Tyr	His Pro Thr Glu Val	Gly Lys Glu Ser Leu Cys
405	410	415
Lys Asn Ile Leu Cys	Tyr Ile Gln Gly Gly	Ser Pro Leu Ser Leu Thr
420	425	430
Leu Ser Gly Val Cys	Val Gly Pro Pro Ala	Val Lys Glu Val Val Asn
435	440	445
Phe Thr Cys Gln Val	Arg Ser Lys His Thr	Gln Thr Ile Leu Leu Ser
450	455	460
Asn Arg Thr Asn Gln	Thr Trp Asn Leu His	Pro Ile Phe Glu Gly Glu
465	470	475
His Trp Glu Gly Pro	Glu Phe Ile Thr Leu	Glu Ala His Gln Gln Asn
485	490	495
Lys Pro Tyr Glu Ile	Thr Tyr Arg Pro Arg	Thr Met Asn Leu Glu Asn
500	505	510
Arg Lys His Gln Gly	Thr Leu Phe Phe Pro	Leu Pro Asp Gly Thr Gly
515	520	525
Trp Leu Tyr Ala Leu	His Gly Thr Ser Glu	Leu Pro Lys Ala Val Ala
530	535	540
Asn Ile Tyr Arg Glu	Val Pro Cys Lys Thr	Pro Tyr Thr Glu Leu Leu
545	550	555
Pro Ile Thr Asn Trp	Leu Asn Lys Pro Gln	Arg Phe Arg Val Ile Val
565	570	575
Glu Ile Leu Lys Pro	Glu Lys Pro Asp Leu	Ser Ile Thr Met Lys Gly
580	585	590
Leu Asp Tyr Ile Asp	Val Leu Ser Gly Ser	Lys Lys Asp Tyr Lys Leu
595	600	605
Asn Phe Phe Ser His	Lys Glu Gly Thr Tyr	Ala Ala Lys Val Ile Phe
610	615	620
Arg Asn Glu Val Thr	Asn Glu Phe Leu Tyr	Tyr Asn Val Ser Phe Arg
625	630	635
Val Ile Pro Ser Gly	Ile Ile Lys Thr Ile	Glu Met Val Thr Pro Val

240
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300

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 420
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 876

<210> 2900
 <211> 189
 <212> PRT
 <213> Homo sapiens

<400> 2900
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 Asp Glu Ser Ser Val Lys Lys Met Ile Leu Thr Phe Glu Lys Arg Ser
 35 40 45
 Tyr Lys Asn Gln Glu Leu Arg Ile Lys Phe Pro Asp Asn Pro Glu Lys
 50 55 60
 Phe Met Glu Ser Glu Leu Asp Leu Asn Asp Ile Ile Gln Glu Met His
 65 70 75 80
 Val Val Ala Thr Met Pro Asp Leu Tyr His Leu Leu Val Glu Leu Asn
 85 90 95
 Ala Val Gln Ser Leu Leu Gly Leu Leu Gly His Asp Asn Thr Asp Val
 100 105 110
 Ser Ile Ala Val Val Asp Leu Leu Gln Glu Leu Thr Asp Ile Asp Thr
 115 120 125
 Leu His Glu Ser Glu Glu Gly Ala Glu Val Leu Ile Asp Ala Leu Val
 130 135 140
 Asp Gly Gln Val Val Ala Leu Leu Val Gln Asn Leu Glu Arg Leu Asp
 145 150 155 160
 Glu Ser Val Lys Glu Glu Ala Asp Gly Val His Asn Thr Leu Ala Ile
 165 170 175
 Val Glu Asn Met Ala Glu Phe Arg Pro Glu Met Cys Thr
 180 185

<210> 2901
 <211> 756

<212> DNA

<213> Homo sapiens

<400> 2901

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 120
 ctggaccctc tgggcattat gcgctccaag aagcccaaga aacatcccaa agtggccgtg
 180
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 240
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 300
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 360
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 420
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<210> 2902

<211> 158

<212> PRT

<213> Homo sapiens

<400> 2902

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			20					25					30		
Glu	Ser	Leu	Glu	Glu	Glu	Glu	Ala	Leu	Asp	Pro	Leu	Gly	Ile	Met	Arg
		35					40					45			
Ser	Lys	Lys	Pro	Lys	Lys	His	Pro	Lys	Val	Ala	Val	Lys	Ala	Lys	Pro
		50				55					60				
Ser	Pro	Arg	Leu	Thr	Ile	Phe	Asp	Glu	Glu	Val	Asp	Pro	Asp	Glu	Gly
65					70					75				80	
Leu	Phe	Gly	Pro	Gly	Arg	Lys	Leu	Ser	Pro	Gln	Asp	Pro	Ser	Glu	Asp
			85						90					95	
Val	Ser	Ser	Met	Asp	Pro	Leu	Lys	Leu	Phe	Asp	Asp	Pro	Asp	Leu	Gly
			100					105					110		
Gly	Ala	Ile	Pro	Leu	Gly	Asp	Ser	Leu	Leu	Leu	Pro	Ala	Ala	Cys	Glu
		115				120						125			
Ser	Gly	Gly	Pro	Thr	Pro	Ser	Leu	Ser	His	Arg	Asp	Ala	Ser	Lys	Glu

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<210> 2903
 <211> 542
 <212> DNA
 <213> Homo sapiens

<400> 2903
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 120
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 180
 aagccctact acgagggtgcg gctggcttct gtgcttggct cagagccttc cctggactct
 240
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 300
 ggggactacg cgcccatcct ccagaagggtg gtggagcagc tggagaaagc caaggcctat
 360
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 420
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 540
 gt
 542

<210> 2904
 <211> 180
 <212> PRT
 <213> Homo sapiens

<400> 2904
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 20 25 30
 Ala Lys Leu Ala Gln Asp Phe Leu Asp Ser Gln Asn Leu Ser Ala Tyr
 35 40 45
 Asn Thr Arg Leu Phe Lys Glu Val Asp Gly Glu Gly Lys Pro Tyr Tyr
 50 55 60
 Glu Val Arg Leu Ala Ser Val Leu Gly Ser Glu Pro Ser Leu Asp Ser
 65 70 75 80
 Glu Val Thr Ser Lys Leu Lys Ser Tyr Glu Phe Arg Gly Ser Pro Phe
 85 90 95
 Gln Val Thr Arg Gly Asp Tyr Ala Pro Ile Leu Gln Lys Val Val Glu
 100 105 110
 Gln Leu Glu Lys Ala Lys Ala Tyr Ala Ala Asn Ser His Gln Gly Gln
 115 120 125
 Met Leu Ala Gln Tyr Ile Glu Ser Phe Thr Gln Gly Ser Ile Glu Ala

130	135	140
His Lys Arg Gly Ser Arg	Phe Trp Ile Gln Asp	Lys Gly Pro His Arg
145	150	155
Gly Glu Val Arg Arg	Gln Leu His Pro Thr	Cys Pro Leu Leu Pro Ala
165	170	175
Pro Pro Ser Arg		
180		

<210> 2905
 <211> 814
 <212> DNA
 <213> Homo sapiens

<400> 2905
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 120
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 180
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 240
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<210> 2906
 <211> 200
 <212> PRT
 <213> Homo sapiens

<400> 2906
 Phe Ser Tyr Pro Ser Phe Val Tyr Leu Gly Thr Phe Thr Leu Val Asp
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 Asn Arg Ile Pro Val Thr Arg Ser Phe Phe Cys Ile Thr Asn Ser Ala
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 Thr Leu Phe Gln Asn Trp Val Ser Gly Phe Leu Leu Cys Pro Gly Phe

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<400> 2908
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Met Thr Ala Ser Leu Asn Gly Trp Val Leu Arg Asn Ser Ile Phe Thr
      20             25             30
Phe Pro Arg Leu Leu Ser Asn Phe Gln His Cys Pro Gln Asp Tyr Lys
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		35					40					45							
Gly	Lys	Gly	Ile	Leu	Pro	Leu	Met	Leu	Asp	Gly	Pro	Glu	Thr	Ala	Pro				
	50						55				60								
Pro	Trp	Ala	His	Tyr	Thr	Gly	Thr	Ser	Phe	Lys	Leu	Pro	Cys	Ser	Thr				
65					70					75					80				
Arg	Arg	Ala	Pro	Gln	Pro	Arg	Thr	Thr	Glu	Gln	Met	Met	Ala	Arg	Arg				
			85						90					95					
Pro	Gln	Asn	Pro	Asp	Arg	Pro	Ser	Trp	Leu	Ala	Leu	Ala	Asp	Ala	Thr				
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<210> 2909

<211> 2420

<212> DNA

<213> Homo sapiens

<400> 2909

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480
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1080

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<210> 2910

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2910

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Thr Glu Pro Pro Val Phe Cys Leu Arg Ala Ser Phe Met Ala Trp Thr			
35	40	45	
Gly Asn Ala Met Cys Ser His Lys Cys Thr Thr Ile Val His Gln His			
50	55	60	
Leu Tyr Asn Ile Lys Gly Val Ile Tyr Lys Ser Thr Ala Ile Val His			
65	70	75	80
Arg Met Val Met Ala Gly Glu Pro Arg Pro Pro Val Leu Cys Ser Phe			
85	90	95	
Ser Thr Gly Glu His Leu Gly Ser Cys His Lys Ala Arg Gly Gly Pro			
100	105	110	
Ser Leu Gly Leu Ser Trp Gly Arg Gln Gln Val Cys Lys Asp Ser Ser			
115	120	125	
Gly Pro Val Leu Thr Gly Ile Arg Gly Gln Glu Arg Gln Val Cys Leu			
130	135	140	
Cys Leu Gly Leu Ile Gly Arg Leu Val			
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<210> 2911

<211> 1327

<212> DNA

<213> Homo sapiens

<400> 2911

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840

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 1327

<210> 2912
 <211> 350
 <212> PRT
 <213> Homo sapiens

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 Arg Ser Ser Gly Gly Gly Gly Trp Ala Asp Pro Arg Thr Cys Leu Ser
 35 40 45
 Leu Leu Ser Leu Gly Thr Cys Leu Gly Leu Ala Trp Phe Val Phe Gln
 50 55 60
 Gln Ser Glu Lys Phe Ala Lys Val Glu Asn Gln Tyr Gln Leu Leu Lys
 65 70 75 80
 Leu Glu Thr Asn Glu Phe Gln Gln Leu Gln Ser Lys Ile Ser Leu Ile
 85 90 95
 Ser Glu Lys Trp Gln Lys Ser Glu Ala Ile Met Glu Gln Leu Lys Ser
 100 105 110
 Phe Gln Ile Ile Ala His Leu Lys Arg Leu Gln Glu Glu Ile Asn Glu
 115 120 125
 Val Lys Thr Trp Ser Asn Arg Ile Thr Glu Lys Gln Asp Ile Leu Asn
 130 135 140
 Asn Ser Leu Thr Thr Leu Ser Gln Asp Ile Thr Lys Val Asp Gln Ser
 145 150 155 160
 Thr Thr Ser Met Ala Lys Asp Val Gly Leu Lys Ile Thr Ser Val Lys
 165 170 175
 Thr Asp Ile Arg Arg Ile Ser Gly Leu Val Thr Asp Val Ile Ser Leu
 180 185 190
 Thr Asp Ser Val Gln Glu Leu Glu Asn Lys Ile Glu Lys Val Glu Lys
 195 200 205
 Asn Thr Val Lys Asn Ile Gly Asp Leu Leu Ser Ser Ser Ile Asp Arg
 210 215 220
 Thr Ala Thr Leu Arg Lys Thr Ala Ser Glu Asn Ser Gln Arg Ile Asn

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225          230          235          240
Ser Val Lys Lys Thr Leu Thr Glu Leu Lys Ser Asp Phe Asp Lys His
          245          250          255
Thr Asp Arg Phe Leu Ser Leu Glu Gly Asp Arg Ala Lys Val Leu Lys
          260          265          270
Thr Val Thr Phe Ala Asn Asp Leu Lys Pro Lys Val Tyr Asn Leu Lys
          275          280          285
Lys Asp Phe Ser Arg Leu Glu Pro Leu Val Asn Asp Leu Thr Leu Arg
          290          295          300
Ile Gly Arg Leu Val Thr Asp Leu Leu Gln Arg Glu Lys Glu Ile Ala
305          310          315          320
Phe Leu Ser Glu Lys Ile Ser Asn Leu Thr Ile Val Gln Ala Glu Ile
          325          330          335
Lys Asp Ile Lys Asp Glu Ile Ala His Ile Ser Asp Met Asn
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<210> 2913
 <211> 361
 <212> DNA
 <213> Homo sapiens

<400> 2913
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 120
 cggcgcattgg acgtcttcac tgaggctgag ttgaggggtga agtttcttca ggcccagat
 180
 gcttggtctcc ggtccatcct gactgccatt cctaattgatg atccctatatt ccatattaca
 240
 aaaaccatcg agggcctccc gtgtccatct ctttgatata atcaccagat accgggcat
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 g
 361

<210> 2914
 <211> 112
 <212> PRT
 <213> Homo sapiens

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<400> 2914
Met Ala Gly Gly Ser Ser Gly Ser Ser Ser Glu Lys Met Ala Arg Tyr
  1          5          10          15
Trp Val Met Ile Ser Lys Arg Trp Thr Arg Glu Ala Leu Asp Gly Phe
          20          25          30
Cys Asn Met Glu Ile Gly Ile Ile Ile Arg Asn Gly Ser Gln Asp Gly
          35          40          45
Pro Glu Pro Ser Ile Ser Gly Leu Lys Lys Leu His Pro Gln Leu Ser
          50          55          60
Leu Ser Glu Asp Val His Ala Pro Gln Val Ala Asn Asp Thr Glu Ala
65          70          75          80
Gly Arg Lys Leu Asp Val Gly Pro Gln Leu Leu Asp Gln Leu Ala Gln

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	85		90		95										
His	Gln	Leu	His	Gly	Leu	Ala	His	Phe	Val	His	Asp	Ala	Leu	Asp	Asp
	100						105						110		

<210> 2915
 <211> 1782
 <212> DNA
 <213> Homo sapiens

<400> 2915
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 120
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 180
 gcgcaacaac ttcaccaact tcttgcatcg aaagaacagg aacacaggaa ggaacttgaa
 240
 acaagggagt tttttactga tgctgacttc caggatgcct tagctaaaga aatagccaaa
 300
 gaagagaaaa agcatgagca aatgataaaa gaataccaag agaaaattga cgtgtttaagc
 360
 cagcagtata tggattttaga aaatgaattc cgtattgctt taactgttga agccagaaga
 420
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 480
 gctcttattt gggctcaacg aaaagaaaat gagtcttctt ctttaattaa agatctgacc
 540
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 600
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 660
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 720
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 780
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 960
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 1020
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 1080
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 1140
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 1200
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 1260
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 1320

catagtatgg atgatgcctt taaaagacaa gttgatgcaa ttgttgaagc tcatcaagct
 1380
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 1440
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 1620
 tattgtaata gtagtaactg ctatgacttt gaaatgtctc tttctataca tttcattatg
 1680
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 1740
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 1782

<210> 2916
 <211> 519
 <212> PRT
 <213> Homo sapiens

<400> 2916
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 Ile Gln Glu Val Glu Leu Lys Ala Ser Ala Ala Asp Arg Glu Ile Tyr
 35 40 45
 Leu Leu Arg Thr Ser Leu His Arg Glu Arg Glu Gln Ala Gln Gln Leu
 50 55 60
 His Gln Leu Leu Ala Leu Lys Glu Gln Glu His Arg Lys Glu Leu Glu
 65 70 75 80
 Thr Arg Glu Phe Phe Thr Asp Ala Asp Phe Gln Asp Ala Leu Ala Lys
 85 90 95
 Glu Ile Ala Lys Glu Glu Lys Lys His Glu Gln Met Ile Lys Glu Tyr
 100 105 110
 Gln Glu Lys Ile Asp Val Leu Ser Gln Gln Tyr Met Asp Leu Glu Asn
 115 120 125
 Glu Phe Arg Ile Ala Leu Thr Val Glu Ala Arg Arg Phe Gln Asp Val
 130 135 140
 Lys Asp Gly Phe Glu Asn Val Ala Thr Glu Leu Ala Lys Ser Lys His
 145 150 155 160
 Ala Leu Ile Trp Ala Gln Arg Lys Glu Asn Glu Ser Ser Ser Leu Ile
 165 170 175
 Lys Asp Leu Thr Cys Met Val Lys Glu Gln Lys Thr Lys Leu Ala Glu
 180 185 190
 Val Ser Lys Leu Lys Gln Glu Thr Ala Ala Asn Leu Gln Asn Gln Ile
 195 200 205
 Asn Thr Leu Glu Ile Leu Ile Glu Asp Asp Lys Gln Lys Ser Ile Gln
 210 215 220
 Ile Glu Leu Leu Lys His Glu Lys Val Gln Leu Ile Ser Glu Leu Ala
 225 230 235 240
 Ala Lys Glu Ser Leu Ile Phe Gly Leu Arg Thr Glu Arg Lys Val Trp
 245 250 255
 Gly His Glu Leu Ala Gln Gln Gly Ser Ser Leu Ala Gln Asn Arg Gly

260 265 270
 Lys Leu Glu Ala Gln Ile Glu Ser Leu Ser Arg Glu Asn Glu Cys Leu
 275 280 285
 Arg Lys Thr Asn Glu Ser Asp Ser Asp Ala Leu Arg Ile Lys Cys Lys
 290 295 300
 Ile Ile Asp Asp Gln Thr Glu Thr Ile Arg Lys Leu Lys Asp Cys Leu
 305 310 315 320
 Gln Glu Lys Asp Glu His Ile Lys Arg Leu Gln Glu Lys Ile Thr Glu
 325 330 335
 Ile Glu Lys Cys Thr Gln Glu Gln Leu Asp Glu Lys Ser Ser Gln Leu
 340 345 350
 Asp Glu Val Leu Glu Lys Leu Glu Arg His Asn Glu Arg Lys Glu Lys
 355 360 365
 Leu Lys Gln Gln Leu Lys Gly Lys Glu Val Glu Leu Glu Glu Ile Arg
 370 375 380
 Lys Ala Tyr Ser Thr Leu Asn Arg Lys Trp His Asp Lys Gly Glu Leu
 385 390 395 400
 Leu Cys His Leu Glu Thr Gln Val Lys Glu Val Lys Glu Lys Phe Glu
 405 410 415
 Asn Lys Glu Lys Lys Leu Lys Ala Glu Arg Asp Lys Ser Ile Glu Leu
 420 425 430
 Gln Lys Asn Ala Met Glu Lys Leu His Ser Met Asp Asp Ala Phe Lys
 435 440 445
 Arg Gln Val Asp Ala Ile Val Glu Ala His Gln Ala Glu Ile Ala Gln
 450 455 460
 Leu Ala Asn Glu Lys Gln Lys Cys Ile Asp Ser Ala Asn Leu Lys Val
 465 470 475 480
 His Gln Ile Glu Lys Glu Met Arg Glu Leu Leu Glu Glu Thr Cys Lys
 485 490 495
 Asn Lys Lys Thr Met Glu Ala Lys Ile Lys Gln Leu Ala Phe Ala Leu
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 Asn Glu Ile Gln Gln Asp Met
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<210> 2917

<211> 2636

<212> DNA

<213> Homo sapiens

<400> 2917

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 180
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 300
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480
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720
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780
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1980
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2040

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 2280
 ctacagtggg gcctggaatg cgagccaggc cgggtagctt cctcctccag ccctcagggg
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 2460
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 2520
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<210> 2918

<211> 509

<212> PRT

<213> Homo sapiens

<400> 2918

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			20					25					30		
Met	Asp	Glu	Leu	Val	Pro	Leu	Gly	Glu	Leu	Thr	Lys	His	Ser	Thr	Ser
		35					40					45			
Ala	Val	Asp	Leu	Ser	Thr	Xaa	Phe	Ala	Gln	Ile	Ser	His	Thr	Ala	Arg
	50					55					60				
Gln	Leu	Asp	Trp	Pro	Asp	Pro	Glu	Glu	Ala	Phe	Met	Ile	Thr	Val	Lys
65					70				75					80	
Phe	Val	Glu	Asp	Thr	Cys	Arg	Leu	Ala	Leu	Val	Tyr	Cys	Ser	Leu	Ile
			85					90						95	
Lys	Ala	Arg	Ala	Arg	Glu	Leu	Ser	Ser	Gly	Gln	Lys	Asp	Gln	Gly	Gln
			100					105					110		
Ala	Ala	Asn	Met	Leu	Cys	Val	Val	Val	Asn	Asp	Met	Glu	Gln	Leu	Arg
		115					120					125			
Leu	Val	Ile	Gly	Lys	Leu	Pro	Ala	Gln	Leu	Ala	Trp	Glu	Ala	Leu	Glu
	130					135					140				
Gln	Arg	Val	Gly	Ala	Val	Leu	Glu	Gln	Gly	Gln	Leu	Gln	Asn	Thr	Leu
145					150				155					160	
His	Ala	Gln	Leu	Gln	Ser	Ala	Leu	Ala	Gly	Leu	Gly	His	Glu	Ile	Arg
			165					170					175		
Thr	Gly	Val	Arg	Thr	Leu	Ala	Glu	Gln	Leu	Glu	Val	Gly	Ile	Ala	Lys
		180					185						190		
His	Ile	Gln	Lys	Leu	Val	Gly	Val	Arg	Glu	Ser	Val	Leu	Pro	Glu	Asp
	195					200						205			
Ala	Ile	Leu	Pro	Leu	Met	Lys	Phe	Leu	Glu	Val	Glu	Leu	Cys	Tyr	Met

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      210      215      220
Asn Thr Asn Leu Val Gln Glu Asn Phe Ser Ser Leu Leu Thr Leu Leu
225      230      235      240
Trp Thr His Thr Leu Thr Val Leu Val Glu Ala Ala Ala Ser Gln Arg
      245      250      255
Ser Ser Ser Leu Ala Ser Asn Arg Leu Lys Ile Ala Leu Gln Asn Leu
      260      265      270
Glu Ile Cys Phe His Ala Glu Gly Cys Gly Leu Pro Pro Lys Ala Leu
      275      280      285
His Thr Ala Thr Phe Gln Ala Leu Gln Arg Asp Leu Glu Leu Gln Ala
      290      295      300
Ala Ser Ser Arg Glu Leu Ile Arg Lys Tyr Phe Cys Ser Arg Ile Gln
305      310      315      320
Gln Gln Ala Glu Thr Thr Ser Glu Glu Leu Gly Ala Val Thr Val Lys
      325      330      335
Ala Ser Tyr Arg Ala Ser Glu Gln Lys Leu Arg Val Glu Leu Leu Ser
      340      345      350
Ala Ser Ser Leu Leu Pro Leu Asp Ser Asn Gly Ser Ser Asp Pro Phe
      355      360      365
Val Gln Leu Thr Leu Glu Pro Arg His Glu Phe Pro Glu Leu Ala Ala
      370      375      380
Arg Glu Thr Gln Lys His Lys Lys Asp Leu His Pro Leu Phe Asp Glu
385      390      395      400
Thr Phe Glu Phe Leu Val Pro Ala Glu Pro Cys Arg Lys Ala Gly Ala
      405      410      415
Cys Leu Leu Leu Thr Val Leu Asp Tyr Asp Thr Leu Gly Ala Asp Asp
      420      425      430
Leu Glu Gly Glu Ala Phe Leu Pro Leu Arg Glu Val Pro Gly Leu Ser
      435      440      445
Gly Ser Glu Glu Pro Gly Glu Val Pro Gln Thr Arg Leu Pro Leu Thr
      450      455      460
Tyr Pro Ala Pro Asn Gly Asp Pro Ile Leu Gln Leu Leu Glu Gly Arg
465      470      475      480
Lys Gly Asp Arg Glu Ala Gln Val Phe Val Arg Leu Arg Arg His Arg
      485      490      495
Ala Lys Gln Ala Ser Gln His Ala Leu Arg Pro Ala Pro
      500      505

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<210> 2919
 <211> 455
 <212> DNA
 <213> Homo sapiens

<400> 2919
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 120
 aggactagct ttggagacgg gcgttggtca agcagcaggg agaggagttt ggacacacaa
 180
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 300

gcaagatggt tagtgagaag gctggacacc tgccgggcca gacctgagtg cacagcctct
360
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gccaagcca tgggtggccac cttctgcttc ttggt
455

<210> 2920
<211> 143
<212> PRT
<213> Homo sapiens

<400> 2920
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20 25 30
Arg Gln Val Ser Ser Leu Leu Thr Asn His Leu Ala Arg Ala Thr Glu
35 40 45
Cys Cys Gly Asn Gln Ala Ala Gly Asn Asp Ala Leu Gln Asp Val Leu
50 55 60
Ser Leu Leu Asn Asp Leu Ser Arg Ser His Ile Gly Lys Ala Ile Leu
65 70 75 80
Ser Gln Pro Ala Cys Val Ser Lys Leu Leu Ser Leu Leu Leu Asp Gln
85 90 95
Arg Pro Ser Pro Lys Leu Val Leu Ile Ile Leu Gln Leu Cys Arg Ala
100 105 110
Ala Leu Pro Leu Met Ser Val Glu Asp Cys Gly Asn Val Glu Leu Pro
115 120 125
Pro Trp Ser Tyr Ser Val Pro Ser Leu Asn Ser Glu Gln Glu Asp
130 135 140

<210> 2921
<211> 1855
<212> DNA
<213> Homo sapiens

<400> 2921
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120
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180
aagattgtcc gggcccaagg gcagtacatg tacgatgaac agggggcaga atacatcgat
240
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300
gagcagaacc aggtgctcaa caccaacagc cggtacctgc atgacaacat cgtggactat
360
gcgcagaggg tgtcagagac cctgccggag cagctctgtg tgttctatct cctgaattct
420
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480

gtggtggtat tagatcatgc gstatcacggc cacctgagct ccctgattga catcagtcce
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600
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1740
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1855

<210> 2922

<211> 452

<212> PRT

<213> Homo sapiens

<400> 2922

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Lys Ile Val Arg Ala Gln Gly Gln Tyr Met Tyr Asp Glu Gln Gly Ala			
35	40	45	
Glu Tyr Ile Asp Cys Ile Ser Asn Val Ala His Val Gly His Cys His			
50	55	60	
Pro Leu Val Val Gln Ala Ala His Glu Gln Asn Gln Val Leu Asn Thr			
65	70	75	80
Asn Ser Arg Tyr Leu His Asp Asn Ile Val Asp Tyr Ala Gln Arg Leu			
85	90	95	
Ser Glu Thr Leu Pro Glu Gln Leu Cys Val Phe Tyr Phe Leu Asn Ser			
100	105	110	
Gly Ser Glu Ala Asn Asp Leu Ala Leu Arg Leu Ala Arg His Tyr Thr			
115	120	125	
Gly His Gln Asp Val Val Val Leu Asp His Ala Tyr His Gly His Leu			
130	135	140	
Ser Ser Leu Ile Asp Ile Ser Pro Tyr Lys Phe Arg Asn Leu Asp Gly			
145	150	155	160
Gln Lys Glu Trp Val His Val Ala Pro Leu Pro Asp Thr Tyr Arg Gly			
165	170	175	
Pro Tyr Arg Xaa Arg Thr Thr Pro Thr Gln Leu Trp Xaa Tyr Ala Asn			
180	185	190	
Glu Val Lys Arg Val Val Ser Ser Ala Gln Glu Lys Gly Arg Lys Ile			
195	200	205	
Ala Ala Phe Phe Ala Glu Ser Leu Pro Ser Val Gly Gly Gln Ile Ile			
210	215	220	
Pro Pro Ala Gly Tyr Phe Ser Gln Val Ala Glu His Ile Arg Lys Ala			
225	230	235	240
Gly Gly Val Phe Val Ala Asp Glu Ile Gln Val Gly Phe Gly Arg Val			
245	250	255	
Gly Lys His Phe Trp Ala Phe Gln Leu Gln Gly Lys Asp Phe Val Pro			
260	265	270	
Asp Ile Val Thr Met Gly Lys Ser Ile Gly Asn Gly His Pro Val Ala			
275	280	285	
Cys Val Ala Ala Thr Gln Pro Val Ala Arg Ala Phe Glu Ala Thr Gly			
290	295	300	
Val Glu Tyr Phe Asn Thr Phe Gly Gly Ser Pro Val Ser Cys Ala Val			
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Gly Leu Ala Val Leu Asn Val Leu Glu Lys Glu Gln Leu Gln Asp His			
325	330	335	
Ala Thr Ser Val Gly Ser Phe Leu Met Gln Leu Leu Trp Gln Gln Lys			
340	345	350	
Ile Arg His Pro Ile Val Gly Asp Val Arg Gly Val Gly Leu Phe Ile			
355	360	365	
Gly Val Asp Leu Ile Lys Asp Glu Ala Thr Arg Thr Pro Ala Thr Glu			
370	375	380	
Glu Ala Xaa Val Tyr Leu Val Ser Arg Leu Lys Glu Asn Tyr Val Leu			
385	390	395	400
Leu Ser Thr Asp Gly Pro Gly Arg Asn Ile Leu Lys Phe Lys Pro Pro			
405	410	415	
Met Cys Phe Ser Leu Asp Asn Ala Arg Gln Val Val Ala Lys Leu Asp			
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440

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<211> 572
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<213> Homo sapiens

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420
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480
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<211> 91
<212> PRT
<213> Homo sapiens

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35 40 45
Arg Arg Thr Gly Ser Thr Ala Ala Pro Ala Ser Ala Pro Pro Ile Ala
50 55 60
Gly Thr Gly Ser Pro Gly Trp Gln Arg Ser Leu Gln Pro Ala Leu Gly
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<210> 2925
<211> 1999
<212> DNA
<213> Homo sapiens

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240
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300
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420
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480
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660
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1560

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 1680
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<210> 2926

<211> 305

<212> PRT

<213> Homo sapiens

<400> 2926

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			20					25					30		
Ser	Gln	Val	Glu	Ser	Glu	Ser	Ser	Val	Leu	Asn	Asp	Ser	Pro	Phe	Pro
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Asn	Thr	Lys	Ser	Ala	Arg	Glu	Arg	Ala	Gly	Gln	Asp	Met	Gly	Leu	Glu
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His	Gly	Phe	Glu	Lys	Pro	Leu	Asp	Ser	Ala	Met	Ser	Ala	Glu	Glu	Asp
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Thr	Asp	Val	Arg	Gly	Arg	Arg	Lys	Lys	Lys	Thr	Pro	Arg	Lys	Ala	Glu
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Asp	Thr	Arg	Glu	Asn	Arg	Lys	Leu	Glu	Asn	Lys	Asn	Ala	Phe	Leu	Glu
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Gly	Arg	Arg	Leu	Ser	Gly	Glu	Glu	Arg	Gly	Leu	Trp	Ser	Thr	Asp	Ser
			165						170				175		
Ala	Glu	Glu	Asp	Lys	Glu	Thr	Lys	Arg	Asn	Glu	Ser	Lys	Glu	Lys	Tyr
			180					185					190		
Gln	Lys	Arg	His	Asp	Ser	Asp	Lys	Glu	Glu	Lys	Gly	Arg	Lys	Glu	Pro
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Lys	Gly	Leu	Lys	Thr	Leu	Lys	Glu	Ile	Arg	Asn	Ala	Phe	Asp	Leu	Phe
	210					215					220				
Lys	Leu	Thr	Pro	Glu	Glu	Lys	Asn	Asp	Val	Ser	Glu	Asn	Asn	Arg	Lys
225					230					235					240
Arg	Glu	Glu	Ile	Pro	Leu	Asp	Phe	Lys	Thr	Ile	Asp	Asp	His	Lys	Thr

245 250 255
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 260 265 270
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 <210> 2927
 <211> 1084
 <212> DNA
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 35 40 45
 Glu Ala Ile Met Ala Gln Gln Asp Arg Ile Gln Gln Glu Ile Ala Val
 50 55 60
 Gln Asn Pro Leu Val Ser Glu Arg Leu Glu Leu Ser Val Leu Tyr Lys
 65 70 75 80
 Glu Tyr Ala Glu Asp Asp Asn Ile Tyr Gln Gln Lys Ile Lys Asp Leu
 85 90 95
 His Lys Lys Tyr Ser Tyr Ile Arg Lys Thr Arg Pro Asp Gly Asn Cys
 100 105 110
 Phe Tyr Arg Ala Phe Gly Phe Ser His Leu Glu Ala Leu Leu Asp Asp
 115 120 125
 Ser Lys Glu Leu Gln Arg Phe Lys Ala Val Ser Ala Lys Ser Lys Glu
 130 135 140
 Asp Leu Val Ser Gln Gly Phe Thr Glu Phe Thr Ile Glu Asp Phe His
 145 150 155 160
 Asn Thr Phe Met Asp Leu Ile Glu Gln Val Glu Lys Gln Thr Ser Val
 165 170 175
 Ala Asp Leu Leu Ala Ser Phe Asn Asp Gln Ser Thr Ser Asp Tyr Leu
 180 185 190
 Val Val Tyr Leu Arg Leu Leu Thr Ser Gly Tyr Leu Gln Arg Glu Ser
 195 200 205
 Lys Phe Phe Glu His Phe Ile Glu Gly Gly Arg Thr Val Lys Glu Phe
 210 215 220
 Cys Gln Gln Glu Val Glu Pro Met Cys Lys Glu Ser Asp His Ile His
 225 230 235 240
 Ile Ile Ala Leu Ala Gln Ala Leu Ser Val Ser Ile Gln Val Glu Tyr
 245 250 255
 Met Asp Arg Gly Glu Gly Gly Thr Thr Asn Pro His Ile Phe Pro Glu
 260 265 270
 Gly Ser Glu Pro Lys Val Tyr Leu Leu Tyr Arg Pro Gly His Tyr Asp
 275 280 285
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 <212> DNA
 <213> Homo sapiens

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4920

<210> 2930

<211> 1166

<212> PRT

<213> Homo sapiens

<400> 2930

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      35           40           45
Gln Lys Glu Asn Met Ile Asp Lys Asp Val Glu Leu Ser Val Val Leu
      50           55           60
Pro Gly Asp Ile Ile Lys Ser Thr Thr Val His Gly Ser Lys Pro Met
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Met Asp Leu Leu Ile Phe Leu Cys Ala Gln Tyr His Leu Asn Pro Ser
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Ser Tyr Thr Ile Asp Leu Leu Ser Ala Glu Gln Asn His Ile Lys Phe
      100          105          110
Lys Pro Asn Thr Pro Ile Gly Met Leu Glu Val Glu Lys Val Ile Leu
      115          120          125
Lys Pro Lys Met Leu Asp Lys Lys Lys Pro Thr Pro Ile Ile Pro Glu
      130          135          140
Lys Thr Val Arg Val Val Ile Asn Phe Lys Lys Thr Gln Lys Thr Ile
145          150          155          160
Val Arg Val Ser Pro His Ala Ser Leu Gln Glu Leu Ala Pro Ile Ile
      165          170          175
Cys Ser Lys Cys Glu Phe Asp Pro Leu His Thr Leu Leu Leu Lys Asp
      180          185          190
Tyr Gln Ser Gln Glu Pro Leu Asp Leu Thr Lys Ser Leu Asn Asp Leu
      195          200          205
Gly Leu Arg Glu Leu Tyr Ala Met Asp Val Asn Arg Glu Ser Cys Gln
      210          215          220
Ile Ser Gln Asn Leu Asp Ile Met Lys Glu Lys Glu Asn Lys Gly Phe
225          230          235          240
Phe Ser Phe Phe Gln Arg Ser Lys Lys Lys Arg Asp Gln Thr Ala Ser
      245          250          255
Ala Pro Ala Thr Pro Leu Val Asn Lys His Arg Pro Thr Phe Thr Arg
      260          265          270
Ser Asn Thr Ile Ser Lys Pro Tyr Ile Ser Asn Thr Leu Pro Ser Asp
      275          280          285
Ala Pro Lys Lys Arg Arg Ala Pro Leu Pro Pro Met Pro Ala Ser Gln
      290          295          300
Ser Val Pro Gln Asp Leu Ala His Ile Gln Glu Arg Pro Ala Ser Cys
305          310          315          320
Ile Val Lys Ser Met Ser Val Asp Glu Thr Asp Lys Ser Pro Cys Glu
      325          330          335
Ala Gly Arg Val Arg Ala Gly Ser Leu Gln Leu Ser Ser Met Ser Ala
      340          345          350
Gly Asn Ser Ser Leu Arg Arg Thr Lys Arg Lys Ala Pro Ser Pro Pro
      355          360          365
Ser Lys Ile Pro Pro His Gln Ser Asp Glu Asn Ser Arg Val Thr Ala

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      370      375      380
Leu Gln Pro Val Asp Gly Val Pro Pro Asp Ser Ala Ser Glu Ala Asn
385      390      395      400
Ser Pro Glu Glu Leu Ser Ser Pro Glu Thr Phe His Pro Gly Leu Ser
      405      410      415
Ser Gln Glu Gln Cys Thr Ala Pro Lys Leu Met Glu Glu Thr Ser Val
      420      425      430
Phe Glu Cys Pro Gly Thr Pro Glu Ala Ala Ile Thr Ser Leu Thr Ser
      435      440      445
Gly Ile Ser Ser Asp Tyr Ser Leu Glu Glu Ile Asp Glu Lys Glu Glu
      450      455      460
Leu Ser Glu Val Pro Lys Val Glu Ala Glu Asn Ile Ser Pro Lys Ser
465      470      475      480
Gln Asp Ile Pro Phe Val Ser Thr Asp Ile Ile Asn Thr Leu Lys Asn
      485      490      495
Asp Pro Asp Ser Ala Leu Gly Asn Gly Ser Gly Glu Phe Ser Gln Asn
      500      505      510
Ser Met Glu Glu Lys Gln Glu Thr Lys Ser Thr Asp Gly Gln Glu Pro
      515      520      525
His Ser Val Val Tyr Asp Thr Ser Asn Gly Lys Lys Val Val Asp Ser
      530      535      540
Ile Arg Asn Leu Lys Ser Leu Gly Pro Asn Gln Glu Asn Val Gln Asn
545      550      555      560
Glu Ile Ile Val Tyr Pro Glu Asn Thr Glu Asp Asn Met Lys Asn Gly
      565      570      575
Val Lys Lys Thr Glu Ile Asn Val Glu Gly Val Ala Lys Asn Asn Asn
      580      585      590
Ile Asp Met Glu Val Glu Arg Pro Ser Asn Ser Glu Ala His Glu Thr
      595      600      605
Asp Thr Ala Ile Ser Tyr Lys Glu Asn His Leu Ala Ala Ser Ser Val
      610      615      620
Pro Asp Gln Lys Leu Asn Gln Pro Ser Ala Glu Lys Thr Lys Asp Ala
625      630      635      640
Ala Ile Gln Thr Thr Pro Ser Cys Asn Ser Phe Asp Gly Lys His Gln
      645      650      655
Asp His Asn Leu Ser Asp Ser Lys Val Glu Glu Cys Val Gln Thr Ser
      660      665      670
Asn Asn Asn Ile Ser Thr Gln His Ser Cys Leu Ser Ser Gln Asp Ser
      675      680      685
Val Asn Thr Ser Arg Glu Phe Arg Ser Gln Gly Thr Leu Ile Ile His
      690      695      700
Ser Glu Asp Pro Leu Thr Val Lys Asp Pro Ile Cys Ala His Gly Asn
705      710      715      720
Asp Asp Leu Leu Pro Pro Val Asp Arg Ile Asp Lys Asn Ser Thr Ala
      725      730      735
Ser Tyr Leu Lys Asn Tyr Pro Leu Tyr Arg Gln Asp Tyr Asn Pro Lys
      740      745      750
Pro Lys Pro Ser Asn Glu Ile Thr Arg Glu Tyr Ile Pro Lys Ile Gly
      755      760      765
Met Thr Thr Tyr Lys Ile Val Pro Pro Lys Ser Leu Glu Ile Ser Lys
      770      775      780
Asp Trp Gln Ser Glu Thr Ile Glu Tyr Lys Asp Asp Gln Asp Met His
785      790      795      800
Ala Leu Gly Lys Lys His Thr His Glu Asn Val Lys Glu Thr Ala Ile

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				805				810						815					
Gln	Thr	Glu	Asp	Ser	Ala	Ile	Ser	Glu	Ser	Pro	Glu	Glu	Pro	Leu	Pro				
			820					825					830						
Asn	Leu	Lys	Pro	Lys	Pro	Asn	Leu	Arg	Thr	Glu	His	Gln	Val	Pro	Ser				
		835					840					845							
Ser	Val	Ser	Ser	Pro	Asp	Asp	Ala	Met	Val	Ser	Pro	Leu	Lys	Pro	Ala				
		850				855					860								
Pro	Lys	Met	Thr	Arg	Asp	Thr	Gly	Thr	Ala	Pro	Phe	Ala	Pro	Asn	Leu				
865					870					875					880				
Glu	Glu	Ile	Asn	Asn	Ile	Leu	Glu	Ser	Lys	Phe	Lys	Ser	Arg	Ala	Ser				
			885					890					895						
Asn	Ala	Gln	Ala	Lys	Pro	Ser	Ser	Phe	Phe	Leu	Gln	Met	Gln	Lys	Arg				
			900					905					910						
Val	Ser	Gly	His	Tyr	Val	Thr	Ser	Ala	Ala	Ala	Lys	Ser	Val	His	Ala				
		915					920					925							
Ala	Pro	Asn	Pro	Ala	Pro	Lys	Glu	Leu	Thr	Asn	Lys	Glu	Ala	Glu	Arg				
		930				935					940								
Asp	Met	Leu	Pro	Ser	Pro	Glu	Gln	Thr	Leu	Ser	Pro	Leu	Ser	Lys	Met				
945					950					955					960				
Pro	His	Ser	Val	Pro	Gln	Pro	Leu	Val	Glu	Lys	Thr	Asp	Asp	Asp	Val				
			965					970					975						
Ile	Gly	Gln	Ala	Pro	Ala	Glu	Ala	Ser	Pro	Pro	Pro	Ile	Ala	Pro	Lys				
		980					985					990							
Pro	Val	Thr	Ile	Pro	Ala	Ser	Gln	Val	Ser	Thr	Gln	Asn	Leu	Lys	Thr				
		995					1000					1005							
Leu	Lys	Thr	Phe	Gly	Ala	Pro	Arg	Pro	Tyr	Ser	Ser	Ser	Gly	Pro	Ser				
		1010				1015					1020								
Pro	Phe	Ala	Leu	Ala	Val	Val	Lys	Arg	Ser	Gln	Ser	Phe	Ser	Lys	Glu				
1025					1030					1035					1040				
Arg	Thr	Glu	Ser	Pro	Ser	Ala	Ser	Ala	Leu	Val	Gln	Pro	Pro	Ala	Asn				
			1045					1050					1055						
Thr	Glu	Glu	Gly	Lys	Thr	His	Ser	Val	Asn	Lys	Phe	Val	Asp	Ile	Pro				
		1060					1065					1070							
Gln	Leu	Gly	Val	Ser	Asp	Lys	Glu	Asn	Asn	Ser	Ala	His	Asn	Glu	Gln				
		1075				1080					1085								
Asn	Ser	Gln	Ile	Pro	Thr	Pro	Thr	Asp	Gly	Pro	Ser	Phe	Thr	Val	Met				
		1090			1095						1100								
Arg	Gln	Ser	Ser	Leu	Thr	Phe	Gln	Ser	Ser	Asp	Pro	Glu	Gln	Met	Arg				
1105				1110						1115					1120				
Gln	Ser	Leu	Leu	Thr	Ala	Ile	Arg	Ser	Gly	Glu	Ala	Ala	Ala	Lys	Leu				
			1125					1130					1135						
Lys	Arg	Val	Thr	Ile	Pro	Ser	Asn	Thr	Ile	Ser	Val	Asn	Gly	Arg	Ser				
		1140					1145					1150							
Arg	Leu	Ser	His	Ser	Met	Ser	Pro	Asp	Ala	Gln	Asp	Gly	His						
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<210> 2931

<211> 625

<212> DNA

<213> Homo sapiens

<400> 2931

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 120
 ttagagatct tcgaagccat attttctcca gatgttttgg gatgaggaga cacaacaaca
 180
 gtgttttttag gttcactctg atgagttgcc atgaaatcaa accaatctaa actgtcatct
 240
 ctgttatttt tgtgctgagc tgaatgtttc ctacttggtg atctattagg ctccagatgc
 300
 ggtgggggat ctagaactgg gcttccctcg gggctgcctc caggagagaa gatatgtgtg
 360
 agccaggcca aaggagcaaa gtggacattg gggtgcttcc atcaccagga gagacaggtg
 420
 ttccatggag ggcagacaat gtggaaagta acaagaaaaa aaggctagca ctagattctg
 480
 aagcagcagt ctctgctgat aaaccagact cagtactgac tcatcatgtc cccaggaacc
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 600
 cacagtgcac agtcccttca cgcgt
 625

<210> 2932
 <211> 90
 <212> PRT
 <213> Homo sapiens

<400> 2932
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 Ser Pro Gly Glu Thr Gly Val Pro Trp Arg Ala Asp Asn Val Glu Ser
 20 25 30
 Asn Lys Lys Lys Arg Leu Ala Leu Asp Ser Glu Ala Ala Val Ser Ala
 35 40 45
 Asp Lys Pro Asp Ser Val Leu Thr His His Val Pro Arg Asn Leu Gln
 50 55 60
 Lys Leu Cys Lys Glu Arg Ala Gln Lys Leu Cys Arg Asn Ser Thr Arg
 65 70 75 80
 Val Pro Ala Gln Cys Thr Val Pro Ser Arg
 85 90

<210> 2933
 <211> 688
 <212> DNA
 <213> Homo sapiens

<400> 2933
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 gatgaggaaa ggatggtaca gagctctcct ccaatatctg gtgaagacaa caaatgggag
 120
 cgagaaagtc aagaaacgac tagagaactt ctgaaagtta aagacagatt aattgaagta
 180
 gaaagaaata atgctacact gcaagcagag aagcaagcgt tgaaaactca actgaagcaa
 240

cttgagacac agaacaataa tttgcaggct cagattcttg cacttcagag gcagacagtg
 300
 tcattacaag aacagaatac cactcttcaa acacagaatg ccaagcttca ggttgaaaat
 360
 tccaccctta attcccaaag tacctcactc atgaaccaga atgcccaact cctaattccag
 420
 cagtcttctt tagaaaatga aaatgaatct gtaatcaaag agcgagaaga cctaaaatct
 480
 ctctatgatt ctctgatcaa agatcatgaa aagctggaac ttcttcatga acgtcaggct
 540
 tcagagtatg aatctcttat ctctaaacat ggaactctga agtctgccca caaaaatctt
 600
 gaggtggaac atagagacct tgaagaccgt tacaatcagt tattaaaaca gaaaggacag
 660
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 688

<210> 2934

<211> 229

<212> PRT

<213> Homo sapiens

<400> 2934

Gln	Leu	Arg	Gln	Glu	Leu	Lys	Thr	Val	Lys	Lys	Asn	Tyr	Glu	Ala	Leu
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Lys	Gln	Arg	Gln	Asp	Glu	Glu	Arg	Met	Val	Gln	Ser	Ser	Pro	Pro	Ile
			20					25					30		
Ser	Gly	Glu	Asp	Asn	Lys	Trp	Glu	Arg	Glu	Ser	Gln	Glu	Thr	Thr	Arg
		35					40					45			
Glu	Leu	Leu	Lys	Val	Lys	Asp	Arg	Leu	Ile	Glu	Val	Glu	Arg	Asn	Asn
	50					55					60				
Ala	Thr	Leu	Gln	Ala	Glu	Lys	Gln	Ala	Leu	Lys	Thr	Gln	Leu	Lys	Gln
65					70					75					80
Leu	Glu	Thr	Gln	Asn	Asn	Asn	Leu	Gln	Ala	Gln	Ile	Leu	Ala	Leu	Gln
				85					90					95	
Arg	Gln	Thr	Val	Ser	Leu	Gln	Glu	Gln	Asn	Thr	Thr	Leu	Gln	Thr	Gln
			100					105					110		
Asn	Ala	Lys	Leu	Gln	Val	Glu	Asn	Ser	Thr	Leu	Asn	Ser	Gln	Ser	Thr
		115					120					125			
Ser	Leu	Met	Asn	Gln	Asn	Ala	Gln	Leu	Leu	Ile	Gln	Gln	Ser	Ser	Leu
		130				135						140			
Glu	Asn	Glu	Asn	Glu	Ser	Val	Ile	Lys	Glu	Arg	Glu	Asp	Leu	Lys	Ser
145					150					155					160
Leu	Tyr	Asp	Ser	Leu	Ile	Lys	Asp	His	Glu	Lys	Leu	Glu	Leu	Leu	His
			165						170					175	
Glu	Arg	Gln	Ala	Ser	Glu	Tyr	Glu	Ser	Leu	Ile	Ser	Lys	His	Gly	Thr
			180					185					190		
Leu	Lys	Ser	Ala	His	Lys	Asn	Leu	Glu	Val	Glu	His	Arg	Asp	Leu	Glu
		195					200					205			
Asp	Arg	Tyr	Asn	Gln	Leu	Leu	Lys	Gln	Lys	Gly	Gln	Leu	Glu	Asp	Leu
	210					215					220				
Glu	Lys	Met	Leu	Lys											
225															

<210> 2935
<211> 1200
<212> DNA
<213> Homo sapiens

<400> 2935
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120
aactctaaaa gataaagcaa gaaatgtcaa gtaggttttg cacattgggc tgctttaggc
180
tgtgccctct gattcttctg gtgtactcat gatactctcc cttggtgccc tccaggctga
240
cgcagctatt tacgttcaga gtgaaatggg ctgtgtggct gggattggga aaggccttgt
300
taaagctggg agaggtttgg tcatggtgac aggggacctg aaggcccagc tcctcttccc
360
tcttgccaat acagggacaa gttaaagaag aagaagaaag taaaggtaaa gatggaaaag
420
aaatccacgc cctctagggg ctcatcatcc aagtcgtcct caaggcagct aagcgagagc
480
ttcaagagca aagagtttgt gtctagtgat gagagctctt cgggagagaa caagagcaaa
540
aagaagagga ggaggagcga ggactctgaa gaagaagaac tagccagtac tccccccagc
600
tcagaggact cagcgtcagg atccgatgag tagaaacgga ggaaggttct ctttgcgctt
660
gccttctcac accccccgga agtcagcagg gaaacgcaga gaactcctat gaaccaccaa
720
aaggctgtaa atgatgaaac atgcaaagct agccacataa catcaagtgt ctttccttca
780
gcctctctcg gtaaagcatc atctcgaaag ccatttgga tcttttctcc aaatgttctg
840
tgcagtatga gtgggaagag tcctgtagag agcagcttga atgttaaaac caaaaagaat
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960
gtgaaacctg gaaataccaa ggaaaaaatt gcattctttg catcccacca gtgtagtaac
1020
aggataggat ctatgaaaat aaaaagtccc tgggatattg atgggagagc tactaagaga
1080
aggaaaaaat caggggatct taaaaaagcc aaggtacagg tggaaaggat gagggagggt
1140
aacagcaggt gctaccaacc tgagcctttt gcatgtggca ttgagcactg ttctgtgcac
1200

<210> 2936
<211> 109
<212> PRT
<213> Homo sapiens

<400> 2936
Ser Trp Glu Arg Phe Gly His Gly Asp Arg Gly Pro Glu Gly Pro Ala

1		5		10		15											
Pro	Leu	Pro	Ser	Cys	Gln	Tyr	Arg	Asp	Lys	Leu	Lys	Lys	Lys	Lys	Lys	Lys	Lys
		20						25					30				
Val	Lys	Val	Lys	Met	Glu	Lys	Lys	Ser	Thr	Pro	Ser	Arg	Gly	Ser	Ser		
		35					40					45					
Ser	Lys	Ser	Ser	Ser	Arg	Gln	Leu	Ser	Glu	Ser	Phe	Lys	Ser	Lys	Glu		
	50					55					60						
Phe	Val	Ser	Ser	Asp	Glu	Ser	Ser	Ser	Gly	Glu	Asn	Lys	Ser	Lys	Lys		
65				70					75					80			
Lys	Arg	Arg	Arg	Ser	Glu	Asp	Ser	Glu	Glu	Glu	Glu	Leu	Ala	Ser	Thr		
			85				90							95			
Pro	Pro	Ser	Ser	Glu	Asp	Ser	Ala	Ser	Gly	Ser	Asp	Glu					
			100					105									

<210> 2937

<211> 749

<212> DNA

<213> Homo sapiens

<400> 2937

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120
ctctcaaatt ttgtcttctg tcaatacaca ttctgggacc agtgtgagtc tacgggtggt
180
gccccgggtgg tggaccccgga ggtgccttca ccacagtcca aggatgccca gtacacagtg
240
accttctccc actgtaagga ctatgtggtg aatgtaacag aagaatttct ggagttcatt
300
tcagatggag cactggccat tgaagtatgg ggccaccggt gtgctggaaa tggcagctcc
360
atctgggagg tcgattctct tcatgctaag acaagaacac tgcattgacag gtggaatgaa
420
gtaacgcgaa gaatagaaat gtggatctcc atattagaat tgaatgagtt aggagagtat
480
gctgcagtgg aacttcatca ggcaaaagat gtcaacacag gaggcattct tcaacttaga
540
cagggtcatt cccgtagagt acaagtcacg gtgaaacctg tgcagcattc agggacactg
600
ccacttatgg ttgaagccat cctgtcagta tccatcggct gtgtaactgc caggtccacc
660
aaactccaaa gagggctgga cagttaccag agagatgatg aggatgggtga tgatatggat
720
agttatcagg aagaagactt aaactgcag
749

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<210> 2938

<211> 249

<212> PRT

<213> Homo sapiens

<400> 2938

Xaa Asn Ser Ser Glu Ser Gly Ser Leu Glu Val Val Asp Ser Ser Gly

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Glu Ile Ile His Arg Val Lys Lys Leu Thr Cys Arg Val Lys Ile Lys			
20	25	30	
Glu Ala Thr Gly Leu Pro Leu Asn Leu Ser Asn Phe Val Phe Cys Gln			
35	40	45	
Tyr Thr Phe Trp Asp Gln Cys Glu Ser Thr Val Ala Ala Pro Val Val			
50	55	60	
Asp Pro Glu Val Pro Ser Pro Gln Ser Lys Asp Ala Gln Tyr Thr Val			
65	70	75	80
Thr Phe Ser His Cys Lys Asp Tyr Val Val Asn Val Thr Glu Glu Phe			
85	90	95	
Leu Glu Phe Ile Ser Asp Gly Ala Leu Ala Ile Glu Val Trp Gly His			
100	105	110	
Arg Cys Ala Gly Asn Gly Ser Ser Ile Trp Glu Val Asp Ser Leu His			
115	120	125	
Ala Lys Thr Arg Thr Leu His Asp Arg Trp Asn Glu Val Thr Arg Arg			
130	135	140	
Ile Glu Met Trp Ile Ser Ile Leu Glu Leu Asn Glu Leu Gly Glu Tyr			
145	150	155	160
Ala Ala Val Glu Leu His Gln Ala Lys Asp Val Asn Thr Gly Gly Ile			
165	170	175	
Phe Gln Leu Arg Gln Gly His Ser Arg Arg Val Gln Val Thr Val Lys			
180	185	190	
Pro Val Gln His Ser Gly Thr Leu Pro Leu Met Val Glu Ala Ile Leu			
195	200	205	
Ser Val Ser Ile Gly Cys Val Thr Ala Arg Ser Thr Lys Leu Gln Arg			
210	215	220	
Gly Leu Asp Ser Tyr Gln Arg Asp Asp Glu Asp Gly Asp Asp Met Asp			
225	230	235	240
Ser Tyr Gln Glu Glu Asp Leu Asn Cys			
245			

<210> 2939

<211> 2405

<212> DNA

<213> Homo sapiens

<400> 2939

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120
ccactgcac cagccaatag gagcccagcc accatggcgg agctgcagga ggtgcagac
180
acagaggaga agccactgtt gccaggacag acgcctgagg cggccaagac tcactctgtg
240
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300
gcgaccccta cctaccacga tgtgggactc aactataaat cttgcttcca gccactgtt
360
cagttcgagg acatgcagga aatcattcag aactttgtgc gggttcatgt ggatgccct
420
ggaatggaag agggagcccc tgtgttcct ttgggatatc agtaccatc tctggaccag
480

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cttgcagaca tgatcccttg cgtcctgcag tacctaaatt tctctacaat aattggagtt
540
ggtggtggag ctggagccta catcctggcg agatatgctc ttaaccaccc ggacactgtt
600
gaaggctcttg tcctcatcaa cattgatccc aatgccaaagg gttggatgga ttgggcagcc
660
cacaagctaa caggcctcac ctcttccatt ccggagatga tccttggaca tcttttcagc
720
caggaagagc tctctggaaa ttctgagttg atacaaaagt acagaaatat cattacacat
780
gcacccaacc tggataacat tgaattgtac tggaacagct acaacaaccg ccgagacctg
840
aactttgagc gtggaggtga tatcacctc aggtgtcctg tgatgctggg ggtaggagac
900
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960
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1080
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1140
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1200
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1620
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1680
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1740
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1800
gagtgtgggg aaggattggg gctggggcaa caggaagggg cctggggccg tttggctgca
1860
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1920
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1980
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2040
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2100

tgaaccaatg tcccttcagc acctcccagg ttagatatgg gggagggtgag ggctgggtcc
 2160
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 2220
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 2280
 aagggagagc gggcggaggg ccccgaggtg gcagcagggg tcaggggaagt gggcttccga
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 2405

<210> 2940

<211> 357

<212> PRT

<213> Homo sapiens

<400> 2940

Met	Ala	Glu	Leu	Gln	Glu	Val	Gln	Ile	Thr	Glu	Glu	Lys	Pro	Leu	Leu
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Pro	Gly	Gln	Thr	Pro	Glu	Ala	Ala	Lys	Thr	His	Ser	Val	Glu	Thr	Pro
			20					25					30		
Tyr	Gly	Ser	Val	Thr	Phe	Thr	Val	Tyr	Gly	Thr	Pro	Lys	Pro	Lys	Arg
		35					40					45			
Pro	Ala	Ile	Leu	Thr	Tyr	His	Asp	Val	Gly	Leu	Asn	Tyr	Lys	Ser	Cys
	50					55					60				
Phe	Gln	Pro	Leu	Phe	Gln	Phe	Glu	Asp	Met	Gln	Glu	Ile	Ile	Gln	Asn
65					70					75				80	
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Val	Phe	Pro	Leu	Gly	Tyr	Gln	Tyr	Pro	Ser	Leu	Asp	Gln	Leu	Ala	Asp
			100					105					110		
Met	Ile	Pro	Cys	Val	Leu	Gln	Tyr	Leu	Asn	Phe	Ser	Thr	Ile	Ile	Gly
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Val	Gly	Val	Gly	Ala	Gly	Ala	Tyr	Ile	Leu	Ala	Arg	Tyr	Ala	Leu	Asn
	130					135					140				
His	Pro	Asp	Thr	Val	Glu	Gly	Leu	Val	Leu	Ile	Asn	Ile	Asp	Pro	Asn
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Ala	Lys	Gly	Trp	Met	Asp	Trp	Ala	Ala	His	Lys	Leu	Thr	Gly	Leu	Thr
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Ser	Ser	Ile	Pro	Glu	Met	Ile	Leu	Gly	His	Leu	Phe	Ser	Gln	Glu	Glu
			180					185					190		
Leu	Ser	Gly	Asn	Ser	Glu	Leu	Ile	Gln	Lys	Tyr	Arg	Asn	Ile	Ile	Thr
		195						200				205			
His	Ala	Pro	Asn	Leu	Asp	Asn	Ile	Glu	Leu	Tyr	Trp	Asn	Ser	Tyr	Asn
	210					215					220				
Asn	Arg	Arg	Asp	Leu	Asn	Phe	Glu	Arg	Gly	Gly	Asp	Ile	Thr	Leu	Arg
225				230					235					240	
Cys	Pro	Val	Met	Leu	Val	Val	Gly	Asp	Gln	Ala	Pro	His	Glu	Asp	Ala
			245						250					255	
Val	Val	Glu	Cys	Asn	Ser	Lys	Leu	Asp	Pro	Thr	Gln	Thr	Ser	Phe	Leu
			260					265					270		
Lys	Met	Ala	Asp	Ser	Gly	Gly	Gln	Pro	Gln	Leu	Thr	Gln	Pro	Gly	Lys

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Leu	Thr	Glu	Ala	Phe	Lys	Tyr	Phe	Leu	Gln	Gly	Met	Gly	Tyr	Met	Ala				
	290						295				300								
Ser	Ser	Cys	Met	Thr	Arg	Leu	Ser	Arg	Ser	Arg	Thr	Ala	Ser	Leu	Thr				
305					310					315					320				
Ser	Ala	Ala	Ser	Val	Asp	Gly	Asn	Arg	Ser	Arg	Ser	Arg	Thr	Leu	Ser				
				325					330					335					
Gln	Ser	Ser	Glu	Ser	Gly	Thr	Leu	Ser	Ser	Gly	Pro	Pro	Gly	His	Thr				
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 <213> Homo sapiens

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 180
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 240
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 <212> PRT
 <213> Homo sapiens

<400> 2942

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 Gly Arg Gly His Asp His Leu Ala Gly Ala Ser Pro Thr Ala Arg Gln
 35 40 45
 His Leu Phe Lys Gln Gly Gln Leu Ser Ala Gln Gly Gly Ala Gln Pro
 50 55 60
 Ser Val Glu Ala Pro Ala Ala Pro Arg Pro Thr Ala Thr Gln Leu Thr
 65 70 75 80
 Arg Asp Leu Leu Arg Ser Arg Gly Ile Ala Gly Leu Tyr Lys Gly Leu
 85 90 95
 Gly Ala Thr Leu Leu Arg Asp Val Pro Phe Ser Val Val Tyr Phe Pro
 100 105 110
 Leu Phe Ala Asn Leu Asn Gln Leu Gly Arg Pro Ala Ser Glu Glu Lys
 115 120 125
 Ser Pro Phe Tyr Val Ser Phe Leu Ala Gly Cys Val Ala Gly Ser Ala
 130 135 140
 Ala Ala Val Ala Val Asn Pro Cys Asp Val Val Lys Thr Arg Leu Gln
 145 150 155 160
 Ser Leu Gln Arg Gly Val Asn Glu Asp Thr Tyr Ser Gly Ile Leu Asp
 165 170 175
 Cys Ala Arg Lys Ile Leu Arg His Glu Gly Pro Ser Ala Phe Leu Lys
 180 185 190
 Gly Ala Tyr Cys Arg Ala Leu Val Ile Ala Pro Leu Phe Gly Ile Ala
 195 200 205
 Gln Val Val Tyr Phe Leu Gly Ile Ala Glu Ser Leu Leu Gly Leu Leu
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 Gln Asp Pro Gln Ala
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<210> 2943

<211> 1501

<212> DNA

<213> Homo sapiens

<400> 2943

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 360
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<210> 2944
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 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Ile Lys Lys Met Arg Glu Gly Pro Ala Lys Asn Met Val Lys Gln Lys
 50 55 60
 Ala Leu Arg Val Leu Lys Gln Lys Arg Met Tyr Glu Gln Gln Arg Asp
 65 70 75 80
 Asn Leu Ala Asn Ser His Ser Thr Trp Asn Ala Asn Tyr Thr Ile Gln

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Ser	Leu	Lys	Asp	Thr	Lys	Thr	Thr	Val	Asp	Ala	Met	Lys	Leu	Gly	Val				
			100					105					110						
Lys	Glu	Met	Lys	Lys	Ala	Tyr	Lys	Gln	Val	Lys	Ile	Asp	Gln	Ile	Glu				
		115					120					125							
Asp	Leu	Gln	Asp	Gln	Leu	Glu	Asp	Met	Met	Glu	Asp	Ala	Asn	Glu	Ile				
		130				135					140								
Gln	Glu	Ala	Leu	Ser	Arg	Ser	Tyr	Gly	Thr	Pro	Glu	Leu	Asp	Glu	Asp				
145					150					155					160				
Asp	Leu	Glu	Ala	Glu	Leu	Asp	Ala	Leu	Gly	Asp	Glu	Leu	Leu	Ala	Asp				
			165						170					175					
Glu	Asp	Ser	Ser	Tyr	Leu	Asp	Glu	Ala	Ala	Ser	Ala	Pro	Ala	Ile	Pro				
			180						185					190					
Glu	Gly	Val	Pro	Thr	Asp	Thr	Lys	Asn	Lys	Asp	Gly	Val	Leu	Val	Asp				
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<210> 2945

<211> 3331

<212> DNA

<213> Homo sapiens

<400> 2945

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<210> 2946

<211> 463

<212> PRT

<213> Homo sapiens

<400> 2946

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			20					25					30		
Lys	Arg	Thr	Thr	Pro	Leu	Gln	Thr	His	Ser	Ile	Ile	Ile	Ser	Asp	Gln
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Val	Pro	Ser	Asp	Gln	Asp	Ala	His	Gln	Tyr	Leu	Arg	Leu	Arg	Asp	Gln
	50					55				60					
Ser	Glu	Ala	Thr	Gln	Val	Met	Ala	Glu	Pro	Gly	Glu	Gly	Gly	Ser	Glu
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Thr	Val	Ala	Leu	Pro	Pro	Pro	Pro	Pro	Ser	Glu	Glu	Gly	Gly	Val	Pro
			85					90						95	
Gln	Asp	Ala	Ala	Gly	Arg	Gly	Gly	Thr	Pro	Gln	Ile	Arg	Val	Val	Gly
		100					105						110		
Gly	Arg	Gly	His	Val	Ala	Ile	Lys	Ala	Gly	Gln	Glu	Glu	Gly	Gln	Pro
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Pro	Ala	Glu	Gly	Leu	Ala	Ala	Ala	Ser	Val	Val	Met	Ala	Ala	Asp	Arg
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<210> 2947
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<212> DNA
<213> Homo sapiens
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240
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<210> 2948

<211> 332

<212> PRT

<213> Homo sapiens

<400> 2948

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			20					25					30		
Ser	Asp	Ile	Arg	Ala	Gly	Thr	Ala	Pro	Ser	Cys	Arg	Asn	His	Ile	Lys
	35						40					45			
Ser	Ser	Cys	Ser	Leu	Ile	Ala	Phe	Asn	Ser	Asp	Arg	Pro	Gly	Val	Leu
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His	Leu	Gly	Cys	His	Ser	Asp	Leu	Val	Thr	Asp	Leu	Asp	Phe	Ser	Pro
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Phe	Asp	Asp	Phe	Leu	Leu	Ala	Thr	Gly	Ser	Ala	Asp	Arg	Thr	Val	Lys
			100					105					110		
Leu	Trp	Arg	Leu	Pro	Gly	Pro	Gly	Gln	Ala	Leu	Pro	Ser	Ala	Pro	Gly
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Val	Val	Leu	Gly	Pro	Glu	Asp	Leu	Pro	Val	Glu	Val	Leu	Gln	Phe	His
	130					135				140					
Pro	Thr	Ser	Asp	Gly	Ile	Leu	Val	Ser	Ala	Ala	Gly	Thr	Thr	Val	Lys
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Gly	Asp	Leu	Val	Gln	Ser	Ala	Val	Trp	Ser	Arg	Asp	Gly	Ala	Leu	Val		
			180					185					190				
Gly	Thr	Ala	Cys	Lys	Asp	Lys	Gln	Leu	Gln	Ile	Phe	Asp	Pro	Arg	Thr		
		195					200					205					
Lys	Pro	Arg	Ala	Ser	Gln	Ser	Thr	Gln	Ala	His	Glu	Asn	Ser	Arg	Asp		
	210					215					220						
Ser	Arg	Leu	Ala	Trp	Met	Gly	Thr	Trp	Glu	His	Leu	Val	Ser	Thr	Gly		
225					230					235					240		
Phe	Asn	Gln	Met	Arg	Glu	Arg	Glu	Val	Lys	Leu	Trp	Asp	Thr	Arg	Phe		
			245					250						255			
Phe	Ser	Ser	Ala	Leu	Ala	Ser	Leu	Thr	Leu	Asp	Thr	Ser	Leu	Gly	Cys		
			260					265					270				
Leu	Val	Pro	Leu	Leu	Asp	Pro	Asp	Ser	Gly	Leu	Leu	Val	Leu	Ala	Gly		
	275					280						285					
Lys	Gly	Glu	Arg	Gln	Leu	Tyr	Cys	Tyr	Glu	Val	Val	Pro	Gln	Gln	Pro		
	290					295					300						
Ala	Leu	Ser	Pro	Val	Thr	Gln	Cys	Val	Leu	Glu	Ser	Val	Leu	Arg	Gly		
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<211> 880

<212> DNA

<213> Homo sapiens

<400> 2949

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<211> 279

<212> PRT

<213> Homo sapiens

<400> 2950

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<211> 3478

<212> DNA

<213> Homo sapiens

<400> 2951

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<211> 493

<212> PRT

<213> Homo sapiens

<400> 2952

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<213> Homo sapiens

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<212> PRT

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<213> Homo sapiens

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Met	Arg	Glu	Ala	Thr	Thr	Leu	Ala	Asn	Gly	Val	Leu	Ala	Ser	Leu	Asn	
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Leu	Pro	Ala	Ala	Ile	Glu	Asp	Val	Ser	Gly	Asp	Thr	Val	Pro	Gln	Ser	
				405					410					415		
Ile	Leu	Thr	Lys	Ser	Arg	Ser	Val	Ile	Glu	Gln	Gly	Gly	Ile	Gln	Thr	
			420					425					430			
Val	Asp	Gln	Leu	Ile	Lys	Glu	Leu	Pro	Glu	Leu	Leu	Gln	Arg	Asn	Arg	
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Glu	Ile	Leu	Glu	Glu	Ser	Leu	Arg	Leu	Leu	Asp	Glu	Glu	Glu	Ala	Thr	
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Asp	Asn	Asp	Leu	Arg	Ala	Lys	Phe	Lys	Asp	Arg	Trp	Gln	Arg	Thr	Pro	
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Ser	Asn	Asp	Leu	Tyr	Lys	Pro	Leu	Arg	Ala	Glu	Gly	Thr	Asn	Phe	Arg	
				485					490					495		
Thr	Val	Leu	Asp	Lys	Ala	Val	Gln	Ala	Asp	Gly	Gln	Val	Lys	Glu	Cys	

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 610 615 620
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 625 630 635 640
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 Gly Thr Lys Phe Tyr Asn Glu Leu Thr Glu Ile Leu Val Arg Phe Gln
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 Asn Lys Cys Ser Asp Ile Val Phe Ala Arg Lys Thr Glu Arg Asp Glu
 690 695 700
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 740 745 750
 Gln Pro Pro Ala Arg Pro Pro Pro Pro Val Leu Pro Ala Asn Arg Ala
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 Pro Ser Ala Thr Ala Pro Ser Pro Val Gly Ala Gly Thr Ala Ala Pro
 770 775 780
 Ala Pro Ser Gln Thr Pro Gly Ser Ala Pro Pro Pro Gln Ala Gln Gly
 785 790 795 800
 Pro Pro Tyr Pro Thr Tyr Pro Gly Tyr Pro Gly Tyr Cys Gln Met Pro
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 Met Pro Met Gly Tyr Asn Pro Tyr Ala Tyr Gly Gln Tyr Asn Met Pro
 820 825 830
 Tyr Pro Pro Val Tyr His Gln Ser Pro Gly Gln Ala Pro Tyr Pro Gly
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<210> 2961

<211> 434

<212> DNA

<213> Homo sapiens

<400> 2961

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 300
 aagtgcggg attacaggca tgagccaccg tgcctggcca gattttgttt ggctatgcc
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<210> 2962
 <211> 92
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Gln Gln Leu Gln Pro Gln Pro Val Ala Val Gln Gly Pro Glu Pro Ala
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<210> 2963
 <211> 567
 <212> DNA
 <213> Homo sapiens

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<210> 2964
 <211> 115
 <212> PRT

<213> Homo sapiens

<400> 2964

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Gly Trp Arg Gly Asp Thr Cys Gln Ser Gly Glu Ala Gly Ser Thr Leu
      35           40           45
Gly Gly Pro Gly Arg Val Trp Gly Thr Ser Leu His Val Val Gly Leu
      50           55           60
Leu Met Val His Glu Trp Val Val Val Lys Gly Ala Val Trp Ala Gly
65           70           75           80
Pro Leu Pro Gln Ala Trp Pro Pro Asp Thr Pro Phe Pro Ala Asp Val
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<210> 2965

<211> 3739

<212> DNA

<213> Homo sapiens

<400> 2965

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840

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<210> 2966

<211> 386

<212> PRT

<213> Homo sapiens

<400> 2966

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<400> 2967

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<210> 2968

<211> 126

<212> PRT

<213> Homo sapiens

<400> 2968

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Trp	Glu	Asp	Lys	Asp	Glu	Phe	Leu	Asp	Val	Ile	Tyr	Trp	Phe	Arg	Gln
		35					40				45				
Ile	Ile	Ala	Val	Val	Leu	Gly	Val	Ile	Trp	Gly	Val	Leu	Pro	Leu	Arg
	50					55					60				
Gly	Phe	Leu	Gly	Ile	Ala	Gly	Phe	Cys	Leu	Ile	Asn	Ala	Gly	Val	Leu

65		70		75		80									
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Gly	Thr	Trp	Glu	Leu	Thr	Lys	Glu	Gly	Phe	Met	Thr	Ser	Phe	Ala	Xaa
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 <212> DNA
 <213> Homo sapiens

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<210> 2970
 <211> 92
 <212> PRT
 <213> Homo sapiens

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			20					25					30		
Ser	Gln	Thr	Ile	Met	Ile	Ala	Trp	Gly	Ser	Pro	Ser	Asn	Arg	Asp	Phe
		35				40						45			
Met	Glu	Thr	Leu	Asn	Thr	Leu	Lys	Tyr	Ala	Asn	Arg	Ala	Arg	Asn	Ile
	50					55				60					
Lys	Asn	Lys	Val	Val	Val	Asn	Gln	Asp	Lys	Thr	Ala	Ser	Lys	Ser	Met

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<210> 2971

<211> 6015

<212> DNA

<213> Homo sapiens

<400> 2971

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<211> 632

<212> PRT

<213> Homo sapiens

<400> 2972

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Arg Glu Val Lys Ser Leu Lys Lys Leu Asn His Ala Asn Val Val Lys
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Leu Lys Glu Val Ile Arg Glu Asn Asp His Leu Tyr Phe Ile Phe Glu
65          70          75          80
Tyr Met Lys Glu Asn Leu Tyr Gln Leu Ile Lys Glu Arg Asn Lys Leu
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Phe Pro Glu Ser Ala Ile Arg Asn Ile Met Tyr Gln Ile Leu Gln Gly
      100          105          110
Leu Ala Phe Ile His Lys His Gly Phe Phe His Arg Asp Leu Lys Pro
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Glu Asn Leu Leu Cys Met Gly Pro Glu Leu Val Lys Ile Ala Asp Phe
      130          135          140
Gly Leu Ala Arg Glu Ile Arg Ser Lys Pro Pro Tyr Thr Asp Tyr Val
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Ser Thr Arg Trp Tyr Arg Ala Pro Glu Val Leu Leu Arg Ser Thr Asn
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Tyr Ser Ser Pro Ile Asp Val Trp Ala Val Gly Cys Ile Met Ala Glu
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Val Tyr Thr Leu Arg Pro Leu Phe Pro Gly Ala Ser Glu Ile Asp Thr
      195          200          205
Ile Phe Lys Ile Cys Gln Val Leu Gly Thr Pro Lys Lys Thr Asp Trp
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225          230          235          240
Cys Val Pro Asn Asn Leu Lys Thr Leu Ile Pro Asn Ala Ser Ser Glu
      245          250          255
Ala Val Gln Leu Leu Arg Asp Met Leu Gln Trp Asp Pro Lys Lys Arg
      260          265          270
Pro Thr Ala Ser Gln Ala Leu Arg Tyr Pro Tyr Phe Gln Val Gly His
      275          280          285
Pro Leu Gly Ser Thr Thr Gln Asn Leu Gln Asp Ser Glu Lys Pro Gln
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Lys Gly Ile Leu Glu Lys Ala Gly Pro Pro Pro Tyr Ile Lys Pro Val
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Gln His Gln Ala Ser Gln Pro Pro Leu His Leu Thr Tyr Pro Tyr Lys
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Ala Glu Val Ser Arg Thr Asp His Pro Ser His Leu Gln Glu Asp Lys
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Pro Ser Pro Leu Leu Phe Pro Ser Leu His Asn Lys His Pro Gln Ser
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Lys Ile Thr Ala Gly Leu Glu His Lys Asn Gly Glu Ile Lys Pro Lys
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Phe	Glu	Ser	Val	Leu	Asp	Leu	Lys	Pro	Ser	Glu	Pro	Val	Gly	Thr	Gly		
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			485					490					495				
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Phe	Ile	Pro	Pro	Asn	Pro	Trp	Ser	Ser	Ser	Gly	Leu	Ser	Gly	Lys	Ser		
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Ser	Thr	Ser	Ser	Ser	Gly	Leu	Thr	Gly	Asn	Tyr	Val	Pro	Ser	Phe	Leu		
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Pro	Gly	Arg	Pro	Phe	Phe	His	Thr	Gln	Pro	Arg	Ser	Thr	Pro	Gly	Leu		
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Ile	Pro	Arg	Pro	Pro	Ala	Ala	Gln	Pro	Val	His	Gly	Arg	Thr	Asp	Trp		
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<210> 2973

<211> 858

<212> DNA

<213> Homo sapiens

<400> 2973

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		20					25					30			
Pro	Ala	Val	Leu	Glu	Ser	Ala	Val	Val	Ser	Ser	Pro	Asp	Pro	Ile	Arg
		35					40					45			
Gly	Glu	Val	Val	Lys	Ala	Phe	Ile	Val	Leu	Thr	Pro	Ala	Tyr	Ser	Ser
	50					55					60				
His	Asp	Pro	Glu	Ala	Leu	Thr	Arg	Glu	Leu	Gln	Glu	His	Val	Lys	Arg
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Val	Thr	Ala	Pro	Tyr	Lys	Thr	Pro	Arg	Lys	Val	Ala	Phe	Val	Ser	Glu
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Leu	Pro	Lys	Thr	Val	Ser	Gly	Lys	Ile	Gln	Arg	Ser	Lys	Leu	Arg	Ser
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<211> 1425

<212> DNA

<213> Homo sapiens

<400> 2975

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<211> 328

<212> PRT

<213> Homo sapiens

<400> 2976

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			20					25					30		
Thr	Leu	Arg	Trp	Glu	Glu	Thr	Arg	Thr	Pro	Glu	Ser	Gln	Pro	Asp	Thr
		35					40					45			
Pro	Pro	Gly	Thr	Pro	Leu	Val	Ser	Gln	Asp	Glu	Lys	Arg	Asp	Ala	Glu
	50					55					60				
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<210> 2977
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<210> 2978

<211> 369

<212> PRT

<213> Homo sapiens

<400> 2978

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Asp	Pro	Asp	Gly	Ser	Trp	Ala	Gln	Ile	Ala	Glu	Lys	Arg	Ala	Val	Leu
		35					40					45			
Ala	His	Val	Asp	Val	Gln	Thr	Leu	Ser	Ser	Gln	Leu	Ala	Val	Thr	Val
	50					55					60				
Gly	Pro	Gly	Glu	Arg	Arg	Ile	Gly	Pro	Gly	Glu	Pro	Leu	Glu	Leu	Leu
65				70					75					80	
Cys	Asn	Val	Ser	Gly	Ala	Leu	Pro	Pro	Ala	Gly	Arg	His	Ala	Ala	Tyr
			85						90					95	
Ser	Val	Gly	Trp	Glu	Met	Ala	Pro	Ala	Gly	Ala	Pro	Gly	Pro	Gly	Arg
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Leu	Val	Ala	Gln	Leu	Asp	Thr	Glu	Gly	Val	Gly	Ser	Leu	Xaa	Ala	Leu

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165	170	175
Glu Ala Ala Ser Ala Arg Ser Arg Pro Leu Pro Val His Val Arg Glu		
180	185	190
Glu Gly Val Val Leu Glu Ala Val Ala Trp Leu Ala Gly Gly Thr Val		
195	200	205
Tyr Arg Gly Glu Thr Ala Ser Leu Leu Cys Asn Ile Ser Val Arg Gly		
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Gly Pro Pro Gly Leu Arg Leu Ala Ala Ser Trp Trp Val Glu Arg Pro		
225	230	235
Glu Asp Gly Glu Leu Ser Ser Val Pro Ala Gln Leu Val Gly Gly Val		
245	250	255
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260	265	270
Val Ser Val Glu Leu Val Gly Pro Arg Ser His Arg Leu Arg Leu His		
275	280	285
Ser Leu Gly Pro Glu Asp Glu Gly Val Tyr His Cys Ala Pro Ser Ala		
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Trp Val Gln His Ala Asp Tyr Ser Trp Tyr Gln Ala Gly Ser Ala Arg		
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Ser Gly Pro Val Thr Val Tyr Pro Tyr Met His Ala Leu Asp Thr Leu		
325	330	335
Phe Val Pro Leu Leu Val Gly Thr Gly Val Ala Leu Val Thr Gly Ala		
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<210> 2979

<211> 2191

<212> DNA

<213> Homo sapiens

<400> 2979

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<210> 2980
 <211> 140
 <212> PRT
 <213> Homo sapiens

<400> 2980
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 20 25 30
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 35 40 45
 Asn Ala Arg Arg Ala Arg Val Gly Arg Ala Glu Cys Leu Leu Ser Gly
 50 55 60
 Arg Pro Pro Thr Ala Val Leu Pro Arg Leu Val Glu Asn Leu Lys Ala
 65 70 75 80
 Arg Val Pro Val Pro Gly His Thr Glu Pro Leu Trp Ser Glu Gly Thr
 85 90 95
 Ala Pro Gly Gln Gly Leu Trp Ser His Ala Pro Ala Asp Gly Ser Leu
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 Met Asn Leu Ile Arg Thr Leu Val Gly Ala Val Val Phe Glu Leu Leu
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 Ser Met Cys Phe Gly Asp Gly Ala Gly Ala Ala Cys
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<210> 2981
 <211> 617
 <212> DNA
 <213> Homo sapiens

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 240
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 gcagaccccc aaggagtgc ctatgctgag ctaagcacca gcgccctgtc tgaggcagct
 420
 tcagacacca cccaggagcc cccaggatct catgaatatg cggcactgaa agtgtagcaa
 480

gaagacagcc ctggccacta aaagaggggg gatcgtgctg gccaaaggta tcggaaatct
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<210> 2982
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 2982
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 His Ser Ser Ser Ser Glu Glu Ser Thr Lys Arg Thr Ser His Ser Lys
 35 40 45
 Leu Pro Glu Gln Glu Ala Ala Glu Ala Asp Leu Ser Asn Met Glu Arg
 50 55 60
 Val Ser Leu Ser Thr Ala Asp Pro Gln Gly Val Thr Tyr Ala Glu Leu
 65 70 75 80
 Ser Thr Ser Ala Leu Ser Glu Ala Ala Ser Asp Thr Thr Gln Glu Pro
 85 90 95
 Pro Gly Ser His Glu Tyr Ala Ala Leu Lys Val
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<210> 2983
 <211> 614
 <212> DNA
 <213> Homo sapiens

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 120
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 180
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 240
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 300
 cgtgcagtgg ccgaggggtt tctgctgggc tattccatca cagactatga cagctacttg
 360
 tccatccgac ccttttatca gcacatccgg aaggtccacc ctgactctaa agccctgtc
 420
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 480
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614

<210> 2984
<211> 204
<212> PRT
<213> Homo sapiens

<400> 2984
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Gly Ala Gly Arg Val Gly Lys Ser Ala Met Ile Val Arg Phe Leu Thr
35 40 45
Lys Arg Phe Ile Gly Asp Tyr Glu Pro Asn Thr Gly Lys Leu Tyr Ser
50 55 60
Arg Leu Val Tyr Val Glu Gly Asp Gln Leu Ser Leu Gln Ile Gln Asp
65 70 75 80
Thr Pro Gly Gly Val Gln Ile Gln Asp Ser Leu Pro Gln Val Val Asp
85 90 95
Ser Leu Gln Met Arg Ala Val Ala Glu Gly Phe Leu Leu Val Tyr Ser
100 105 110
Ile Thr Asp Tyr Asp Ser Tyr Leu Ser Ile Arg Pro Leu Tyr Gln His
115 120 125
Ile Arg Lys Val His Pro Asp Ser Lys Ala Pro Val Ile Ile Val Gly
130 135 140
Asn Lys Gly Asp Leu Leu His Ala Arg Gln Val Gln Thr Gln Asp Gly
145 150 155 160
Ile Gln Leu Ala Asn Glu Leu Gly Ser Leu Phe Leu Glu Ile Ser Thr
165 170 175
Ser Glu Asn Tyr Glu Asp Val Cys Asp Val Phe Gln His Leu Cys Lys
180 185 190
Glu Val Ser Lys Met His Gly Leu Ser Gly Glu Arg
195 200

<210> 2985
<211> 4547
<212> DNA
<213> Homo sapiens

<400> 2985
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360

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<210> 2986
 <211> 988
 <212> PRT
 <213> Homo sapiens

<400> 2986
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 Glu Leu Cys Val Lys Leu Met Phe Leu His Pro Val Asp Tyr Gly Arg
 35 40 45
 Lys Ala Glu Glu Leu Leu Trp Arg Lys Val Tyr Tyr Glu Val Ile Gln
 50 55 60
 Leu Ile Lys Thr Asn Lys Lys His Ile His Ser Arg Ser Thr Leu Glu
 65 70 75 80
 Cys Ala Tyr Arg Thr His Leu Val Ala Gly Ile Gly Phe Tyr Gln His
 85 90 95
 Leu Leu Leu Tyr Ile Gln Ser His Tyr Gln Leu Glu Leu Gln Cys Cys
 100 105 110
 Ile Asp Trp Thr His Val Thr Asp Pro Leu Ile Gly Cys Lys Lys Pro

115	120	125
Val Ser Ala Ser Gly Lys Glu Met Asp Trp Ala Gln Met Ala Cys His		
130	135	140
Arg Cys Leu Val Tyr Leu Gly Asp Leu Ser Arg Tyr Gln Asn Glu Leu		
145	150	155
Ala Gly Val Asp Thr Glu Leu Leu Ala Glu Arg Phe Tyr Tyr Gln Ala		
165	170	175
Leu Ser Val Ala Pro Gln Ile Gly Met Pro Phe Asn Gln Leu Gly Thr		
180	185	190
Leu Ala Gly Ser Lys Tyr Tyr Asn Val Glu Ala Met Tyr Cys Tyr Leu		
195	200	205
Arg Cys Ile Gln Ser Glu Val Ser Phe Glu Gly Ala Tyr Gly Asn Leu		
210	215	220
Lys Arg Leu Tyr Asp Lys Ala Ala Lys Met Tyr His Gln Leu Lys Lys		
225	230	235
Cys Glu Thr Arg Lys Leu Ser Pro Gly Lys Lys Arg Cys Lys Asp Ile		
245	250	255
Lys Arg Leu Leu Val Asn Phe Met Tyr Leu Gln Ser Leu Leu Gln Pro		
260	265	270
Lys Ser Ser Ser Val Asp Ser Glu Leu Thr Ser Leu Cys Gln Ser Val		
275	280	285
Leu Glu Asp Phe Asn Leu Cys Leu Phe Tyr Leu Pro Ser Ser Pro Asn		
290	295	300
Leu Ser Leu Ala Ser Glu Asp Glu Glu Glu Tyr Glu Ser Gly Tyr Ala		
305	310	315
Phe Leu Pro Asp Leu Leu Ile Phe Gln Met Val Ile Ile Cys Leu Met		
325	330	335
Cys Val His Ser Leu Glu Arg Ala Gly Ser Lys Gln Tyr Ser Ala Ala		
340	345	350
Ile Ala Phe Thr Leu Ala Leu Phe Ser His Leu Val Asn His Val Asn		
355	360	365
Ile Arg Leu Gln Ala Glu Leu Glu Glu Gly Glu Asn Pro Val Pro Ala		
370	375	380
Phe Gln Ser Asp Gly Thr Asp Glu Pro Glu Ser Lys Glu Pro Val Glu		
385	390	395
Lys Glu Glu Glu Pro Asp Pro Glu Pro Pro Pro Val Thr Pro Gln Val		
405	410	415
Gly Glu Gly Arg Lys Ser Arg Lys Phe Ser Arg Leu Ser Cys Leu Arg		
420	425	430
Arg Arg Arg His Pro Pro Lys Val Gly Asp Asp Ser Asp Leu Ser Glu		
435	440	445
Gly Phe Glu Ser Asp Ser Ser His Asp Ser Ala Arg Ala Ser Glu Gly		
450	455	460
Ser Asp Ser Gly Ser Asp Lys Ser Leu Glu Gly Gly Gly Thr Ala Phe		
465	470	475
Asp Ala Glu Thr Asp Ser Glu Met Asn Ser Gln Glu Ser Arg Ser Asp		
485	490	495
Leu Glu Asp Met Glu Glu Glu Glu Gly Thr Arg Ser Pro Thr Leu Glu		
500	505	510
Pro Pro Arg Gly Arg Ser Glu Ala Pro Asp Ser Leu Asn Gly Pro Leu		
515	520	525
Gly Pro Ser Glu Ala Ser Ile Ala Ser Asn Leu Gln Ala Met Ser Thr		
530	535	540
Gln Met Phe Gln Thr Lys Arg Cys Phe Arg Leu Ala Pro Thr Phe Ser		

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Gly	Leu	Leu	Pro	Ala	Val	Lys	Val	Phe	Leu	Asp	Trp	Leu	Arg	Thr	Asn
625					630					635					640
Pro	Asp	Leu	Ile	Ile	Val	Cys	Ala	Gln	Ser	Ser	Gln	Ser	Leu	Trp	Asn
			645						650					655	
Arg	Leu	Ser	Val	Leu	Leu	Asn	Leu	Leu	Pro	Ala	Ala	Gly	Glu	Leu	Gln
			660					665					670		
Glu	Ser	Gly	Leu	Ala	Leu	Cys	Pro	Glu	Val	Gln	Asp	Leu	Leu	Glu	Gly
		675					680					685			
Cys	Glu	Leu	Pro	Asp	Leu	Pro	Ser	Ser	Leu	Leu	Leu	Pro	Glu	Asp	Met
	690					695					700				
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Phe	Asp	Thr	Asp	Arg	Pro	Leu	Leu	Ser	Thr	Leu	Glu	Glu	Ser	Val	Val
			725						730					735	
Arg	Ile	Cys	Cys	Ile	Arg	Ser	Phe	Gly	His	Phe	Ile	Ala	Arg	Leu	Gln
		740						745					750		
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785					790				795						800
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			805						810					815	
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		820						825					830		
Thr	Gln	Ala	Leu	Cys	His	His	Leu	Pro	Val	Ile	Arg	Gln	Leu	Ala	Thr
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Leu	Glu	Ala	Glu	Phe	Lys	Lys	Gly	Asn	Arg	Tyr	Ile	Arg	Cys	Gln	Lys
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Glu	Val	Gly	Lys	Ser	Phe	Glu	Arg	His	Lys	Leu	Lys	Arg	Gln	Asp	Ala
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Gln	Ala	Ala	Leu	Gln	Ala	Ala	Ala	His	Ala	Ser	Val	Asp	Ile	Lys	Asn
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980

985

<210> 2987

<211> 1016

<212> DNA

<213> Homo sapiens

<400> 2987

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<211> 95

<212> PRT

<213> Homo sapiens

<400> 2988

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Phe	Phe	Val	Phe	Leu	Val	Glu	Met	Gly	Phe	His	Tyr	Val	Ser	Gln	Asp
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 <213> Homo sapiens

<400> 2990
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 35 40 45
 Asp Val Met Leu Glu Thr Tyr Ser Ser Leu Val Ser Leu Gly His Cys
 50 55 60
 Ile Thr Lys Pro Glu Met Ile Phe Lys Leu Glu Gln Gly Ala Glu Pro
 65 70 75 80
 Trp Ile Val Glu Glu Thr Leu Asn Leu Arg Leu Ser Gly Gly Ser Lys
 85 90 95
 Lys Gln Val Phe Ser Gly Ile Cys His Arg Ser Leu Val Glu Leu Gln
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 Glu Val

<210> 2991
 <211> 980
 <212> DNA
 <213> Homo sapiens

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<210> 2992
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 <212> PRT
 <213> Homo sapiens

<400> 2992
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 35 40 45
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<210> 2993
 <211> 687
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 <213> Homo sapiens

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<210> 2994
<211> 229
<212> PRT
<213> Homo sapiens

<400> 2994

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			20					25					30		
Ala	Val	Ala	Thr	Ser	Pro	Asp	Gly	Arg	Tyr	Leu	Lys	Phe	Asp	Ile	Glu
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	50					55					60				
Thr	Thr	Val	Glu	Val	Ala	Trp	Cys	Glu	Leu	Gln	Thr	Arg	Lys	Leu	Ser
65					70					75				80	
Arg	Ala	Glu	Arg	Gln	Arg	Phe	Ser	Glu	Glu	Val	Glu	Met	Leu	Lys	Gly
				85				90					95		
Leu	Gln	His	Pro	Asn	Ile	Val	Arg	Phe	Tyr	Asp	Ser	Trp	Lys	Ser	Val
			100					105					110		
Leu	Arg	Gly	Gln	Val	Cys	Ile	Val	Leu	Val	Thr	Glu	Leu	Met	Thr	Ser
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			180				185					190			
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<210> 2995
<211> 1879
<212> DNA
<213> Homo sapiens

<400> 2995

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1879

<210> 2996
<211> 101
<212> PRT
<213> Homo sapiens

<400> 2996
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Leu Xaa Thr Gln Ala Gly Ile Gln Trp Cys Asp Leu Ser Ser Leu Gln
35 40 45
Pro Pro Pro Pro Arg Phe Lys Arg Phe Ser Cys Leu Ser Leu Leu Ser
50 55 60
Ser Trp Asp Ser Asp Arg Cys Leu Pro Pro His Pro Gly Asp Phe Cys
65 70 75 80
Ile Phe Ser Arg Asp Gly Val Ser Pro Cys Cys Ser Gly Trp Ser Arg
85 90 95
Thr Pro Asp Leu Lys
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<210> 2997
<211> 800
<212> DNA
<213> Homo sapiens

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<210> 2998
 <211> 266
 <212> PRT
 <213> Homo sapiens

<400> 2998
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 Ser Thr Ile Lys Asp Ile Val Ser Thr Thr Ile Pro Ala Ser Ser Glu
 35 40 45
 Ile Thr Arg Ile Glu Met Glu Ser Thr Ser Thr Leu Thr Pro Thr Pro
 50 55 60
 Arg Glu Thr Ser Thr Ser Gln Glu Ile His Ser Ala Thr Lys Pro Ser
 65 70 75 80
 Thr Val Pro Tyr Lys Ala Leu Thr Ser Ala Thr Ile Glu Asp Ser Met
 85 90 95
 Thr Gln Val Met Ser Ser Ser Arg Gly Pro Ser Pro Asp Gln Ser Thr
 100 105 110
 Met Ser Gln Asp Ile Ser Thr Glu Val Ile Thr Arg Leu Ser Thr Ser
 115 120 125
 Pro Ile Lys Thr Glu Ser Thr Glu Met Thr Ile Thr Thr Gln Thr Gly
 130 135 140
 Ser Pro Gly Ala Thr Ser Arg Gly Thr Leu Thr Leu Asp Thr Ser Thr
 145 150 155 160
 Thr Phe Met Ser Gly Thr His Ser Thr Ala Ser Gln Arg Phe Ser His
 165 170 175
 Ser Gln Met Thr Ala Leu Met Ser Arg Thr Pro Gly Asp Val Pro Trp
 180 185 190
 Leu Thr His Pro Ser Gly Glu Glu Pro Ala Ser Ala Ser Phe Ser Leu
 195 200 205
 Ala Ser Pro Val Leu Thr Ser Phe Phe Ser Phe Phe Ala His Ser Gln
 210 215 220
 Lys Pro Pro Pro Phe Leu Val Pro Gly Gln Thr Phe Ser Leu Gly Leu
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<210> 2999
 <211> 550
 <212> DNA
 <213> Homo sapiens

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<210> 3000
 <211> 167
 <212> PRT
 <213> Homo sapiens

<400> 3000
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 35 40 45
 Gly Gly His Gly Trp Ala Gln Gly Lys Ala Pro Gln Val Ala Leu Ala
 50 55 60
 Val Ser Gly Thr Gly Asp Pro Ser Pro Arg Leu Gln Ala Phe Pro Gly
 65 70 75 80
 Leu Glu Val Gly Leu His Cys Gly Pro Ala Ser Phe His Pro Gly Ala
 85 90 95
 Cys Leu Pro Pro Ala Ala Val His Gly Asp Gln Ala Val His Val Lys
 100 105 110
 Gly Cys Leu Gln Ala Ser Thr Gly Leu Ser Ser Val His Pro Ser Ala
 115 120 125
 Ser Phe Pro Cys Leu Ser Val Pro Lys Ala Trp Arg Gly Pro Lys Trp
 130 135 140
 Gln Gly Gly Trp His Val Ser Thr Thr Pro Ser Met Cys Thr Leu Ser
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 Trp Ala Val Thr Ala Pro Gly
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<210> 3001
 <211> 1092
 <212> DNA
 <213> Homo sapiens

<400> 3001

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<210> 3002

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3002

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			20					25					30		
Glu	Val	Gln	Arg	Leu	Ser	Pro	Tyr	Val	Cys	Leu	Gly	Glu	Ser	Gln	Lys
		35					40					45			
Val	Glu	Ser	Gln	Pro	Cys	Ser	Ala	His	Gln	Cys	Phe	Phe	Tyr	Asn	Pro
	50					55					60				
Asp	Ile	Ala	Lys	Thr	Ala	Val	Pro	Thr	Glu	Ala	Ser	Ser	Pro	Ala	Gln

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65          70          75          80
Ala Leu Pro Pro Xaa Ser Thr Lys Ala Ser Leu Ser Gly Lys Gly Tyr
          85          90          95
Arg Thr Gln Cys Ser His Gln Thr Ala Ala Trp Gly Thr Pro Ser Thr
          100          105          110
Glu Arg Ser
          115

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<210> 3003
 <211> 474
 <212> DNA
 <213> Homo sapiens

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<400> 3003
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tatggaagct ctgcggcat acaaccagga gcactcccag agcttcacgt ttgatgatgc
120
ccaacaggag gaccggaaga gactggcgga gctgctggtc tccgtcctgg aacagggctt
180
gccaccctcc caccgtgtca tctggctgca gagtgtccga atcctgtccc gggaccgcaa
240
ctgcctggac ccgttcacca gccgccagag cctgcaggca ctagcctgct atgctgacat
300
ctctgtctct gaggggtccg tcccagagtc cgcagacatg gatgttgtag tggagtcctt
360
caagtgcctg tgcaacctcg tgctcagcag ccctgtggca cagatgctgg cagcagaggc
420
ccgcctagtg gtgaagctca cagagcgtgt ggggctgtac cgtgagagga gctc
474

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<210> 3004
 <211> 155
 <212> PRT
 <213> Homo sapiens

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<400> 3004
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1          5          10          15
Val Ile Met Glu Ala Leu Arg Ser Tyr Asn Gln Glu His Ser Gln Ser
          20          25          30
Phe Thr Phe Asp Asp Ala Gln Gln Glu Asp Arg Lys Arg Leu Ala Glu
          35          40          45
Leu Leu Val Ser Val Leu Glu Gln Gly Leu Pro Pro Ser His Arg Val
          50          55          60
Ile Trp Leu Gln Ser Val Arg Ile Leu Ser Arg Asp Arg Asn Cys Leu
65          70          75          80
Asp Pro Phe Thr Ser Arg Gln Ser Leu Gln Ala Leu Ala Cys Tyr Ala
          85          90          95
Asp Ile Ser Val Ser Glu Gly Ser Val Pro Glu Ser Ala Asp Met Asp
          100          105          110
Val Val Leu Glu Ser Leu Lys Cys Leu Cys Asn Leu Val Leu Ser Ser
          115          120          125
Pro Val Ala Gln Met Leu Ala Ala Glu Ala Arg Leu Val Val Lys Leu

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130 135 140
 Thr Glu Arg Val Gly Leu Tyr Arg Glu Arg Ser
 145 150 155

<210> 3005
 <211> 799
 <212> DNA
 <213> Homo sapiens

<400> 3005
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 gacaacagtg acaacgtgga actcaagttc aatctggacc agtacgtcaa caagcgggtac
 120
 ccaggcctcg tgaagattgt ccgcaacagc cggcgggaag gactgatccg cgcgcggctg
 180
 cagggtctgga aggcggccac cgccccagtc gtcggcttct ttgatgccca cgtcgagtgc
 240
 aacacgggct gggccgagcc cgcactgtcg cggatccgag aggaccggcg tcgcatcgtg
 300
 ctgccagcca tcgacaacat caagtacagc acgtttgagg tgcagcagta tgcgaacgcc
 360
 gcccatggct acaactgggg cctctgggtgc atgtacatca tccccccgca ggactggctg
 420
 gaccgcggcg acgagtcagc acccatcagg accccagcca tgatcggctg ctccttcgta
 480
 gtggaccgcg agtacttcgg agacattggg ctgctggacc ccggcatgga ggtgtatggc
 540
 ggcgagaacg tagaactggg catgagggtg tggcagtgtg gcggcagcat ggagggtgctg
 600
 ccctgctccc gcgtggccca catcgagcgc accaggaagc cctacaacaa cgacattgac
 660
 tactacgcca agcgcaacgc cctgcgcacc gccgaggtgt ggatggatga cttcaagtcc
 720
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 780
 tctgagaggc tggccctgc
 799

<210> 3006
 <211> 266
 <212> PRT
 <213> Homo sapiens

<400> 3006
 Val His Ser Val Val Asn His Thr Pro Ser Gln Leu Leu Lys Glu Val
 1 5 10 15
 Ile Leu Val Asp Asp Asn Ser Asp Asn Val Glu Leu Lys Phe Asn Leu
 20 25 30
 Asp Gln Tyr Val Asn Lys Arg Tyr Pro Gly Leu Val Lys Ile Val Arg
 35 40 45
 Asn Ser Arg Arg Glu Gly Leu Ile Arg Ala Arg Leu Gln Gly Trp Lys
 50 55 60
 Ala Ala Thr Ala Pro Val Val Gly Phe Phe Asp Ala His Val Glu Phe

65		70		75		80
Asn Thr Gly Trp	Ala Glu Pro Ala	Leu Ser Arg	Ile Arg Glu	Asp Arg		
	85	90	95			
Arg Arg Ile Val	Leu Pro Ala Ile	Asp Asn Ile	Lys Tyr Ser	Thr Phe		
	100	105	110			
Glu Val Gln Gln	Tyr Ala Asn Ala	Ala His Gly	Tyr Asn Trp	Gly Leu		
	115	120	125			
Trp Cys Met Tyr	Ile Ile Pro Pro	Gln Asp Trp	Leu Asp Arg	Gly Asp		
	130	135	140			
Glu Ser Ala Pro	Ile Arg Thr Pro	Ala Met Ile	Gly Cys Ser	Phe Val		
145	150	155	160			
Val Asp Arg Glu	Tyr Phe Gly Asp	Ile Gly Leu	Leu Asp Pro	Gly Met		
	165	170	175			
Glu Val Tyr Gly	Gly Glu Asn Val	Glu Leu Gly	Met Arg Val	Trp Gln		
	180	185	190			
Cys Gly Gly Ser	Met Glu Val Leu	Pro Cys Ser	Arg Val Ala	His Ile		
	195	200	205			
Glu Arg Thr Arg	Lys Pro Tyr Asn	Asn Asp Ile	Asp Tyr Tyr	Ala Lys		
	210	215	220			
Arg Asn Ala Leu	Arg Thr Ala Glu	Val Trp Met	Asp Asp Phe	Lys Ser		
225	230	235	240			
His Val Tyr Met	Ala Trp Asn Ile	Pro Met Ser	Asn Pro Gly	Val Asp		
	245	250	255			
Phe Gly Asp Val	Ser Glu Arg Leu	Ala Leu				
	260	265				

<210> 3007

<211> 536

<212> DNA

<213> Homo sapiens

<400> 3007

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 120
 actcagctta ttgacctggg agcagacatt agtttgcgga gtcgctggac aaacatgaat
 180
 gctttgcatt atgctgctta ttttgatgtc cctgaactta taagagtgat ttgaaaaca
 240
 tcgaaaccaa aagatgtgga tgccccttgc agtgatttta attttggaac agctttgcat
 300
 attgcagcat acaacttgtg tgcaggtgct gtgaagtgcc tcttggagca gggagcaaat
 360
 cctgcattta ggaatgacaa aggacagatc cctgctgatg ttgttccaga cccagtagat
 420
 atgccgttag agatggctga cgccgcagcc actgctaagg aaatcaagca gatgcttcta
 480
 gatgcggtgc ctctgtcatg taacatctca aaggccatgc tcccccttc acgcgt
 536

<210> 3008

<211> 163

<212> PRT

<213> Homo sapiens

<400> 3008

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Met Thr Leu Leu His Tyr Thr Cys Lys Ser Gly Ala His Gly Ile Gly
 1          5          10          15
Asp Val Glu Thr Ala Val Lys Phe Ala Thr Gln Leu Ile Asp Leu Gly
          20          25          30
Ala Asp Ile Ser Leu Arg Ser Arg Trp Thr Asn Met Asn Ala Leu His
          35          40          45
Tyr Ala Ala Tyr Phe Asp Val Pro Glu Leu Ile Arg Val Ile Leu Lys
          50          55          60
Thr Ser Lys Pro Lys Asp Val Asp Ala Pro Cys Ser Asp Phe Asn Phe
65          70          75          80
Gly Thr Ala Leu His Ile Ala Ala Tyr Asn Leu Cys Ala Gly Ala Val
          85          90          95
Lys Cys Leu Leu Glu Gln Gly Ala Asn Pro Ala Phe Arg Asn Asp Lys
          100          105          110
Gly Gln Ile Pro Ala Asp Val Val Pro Asp Pro Val Asp Met Pro Leu
          115          120          125
Glu Met Ala Asp Ala Ala Ala Thr Ala Lys Glu Ile Lys Gln Met Leu
          130          135          140
Leu Asp Ala Val Pro Leu Ser Cys Asn Ile Ser Lys Ala Met Leu Pro
145          150          155          160
Pro Ser Arg

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<210> 3009

<211> 1335

<212> DNA

<213> Homo sapiens

<400> 3009

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ggtcggatcg tctcctggc cccgccaaac aggcgggggg agcggccccg actgtggggc
120
catggcagta gtctcctcgt tctccgccgc cgctagccta gctgagtcgc cggcttctgc
180
gctagggggt cccaccgcct ccgcaggcta aggagccgct gccaccaacg agctgtgagg
240
gttactatgc tccctctttg ccgccgtctc ctctctttgc ccgcgcaggc acccctctgg
300
ctgctcagtc ctgcctcagt gtcaaaccag aagagaagta aaattcaaca aaaatttatg
360
tgtggagttc cttcttaaaa gaagaaaaaa gtgattatgt agactatgga tcggagcaaa
420
cggaattcaa ttgcaggatt tctccacgt gtggagcgtc ttgaagagtt tgaaggaggt
480
ggtggaggag aaggaaatgt gagccagggt ggaagagttt ggccatcttc gtatcgagct
540
cttataagt ccttttccag actgacgcgt ttggatgatt tcacctgtaa aaaaataggg
600
tctggcttct tttctgaagt gttcaaggta cgacaccgag cttctgggtca ggtgatggct
660

```

ctttaagatga acacattgag cagtaaccgg gcaaacatgc tgaaagaagt acagctcatg
 720
 aatagactct cccatcccaa catccttagg ttcattgggtg tatgtgttca tcaaggacaa
 780
 ttgcatgcac ttacagagta tatcaactcc gggaacctgg aacagttgct agacagtaac
 840
 ctgcatttgc cttggactgt gagggtaaaa ctggcctatg acatagcagt gggcctcagc
 900
 taccttcact tcaaaggcat ttttcattcg gacctcacat ctaagaactg cctgataaag
 960
 agggatgaga atgggttactc tgcagtggta gctgactttg gctgggctga gaagatcccc
 1020
 gatgtcagca tggggagtga gaagctggcc gtgggtgggtt cccattctg gatggcacct
 1080
 gaggttctcc gagatgagcc ctataatgaa aaggcagatg tgttctctta tggatcatc
 1140
 ctctgcgaga tcatcgccg catccaggcc gatccggact atcttccccg cacagagaat
 1200
 ttcgggctgg actatgatgc tttccagcac atgggtgggag actgtcccc agattttctg
 1260
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 1320
 tggctgaacc ctttt
 1335

<210> 3010

<211> 310

<212> PRT

<213> Homo sapiens

<400> 3010

Met	Asp	Arg	Ser	Lys	Arg	Asn	Ser	Ile	Ala	Gly	Phe	Pro	Pro	Arg	Val
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Glu	Arg	Leu	Glu	Glu	Phe	Glu	Gly	Gly	Gly	Gly	Gly	Glu	Gly	Asn	Val
			20					25					30		
Ser	Gln	Val	Gly	Arg	Val	Trp	Pro	Ser	Ser	Tyr	Arg	Ala	Leu	Ile	Ser
		35					40					45			
Ala	Phe	Ser	Arg	Leu	Thr	Arg	Leu	Asp	Asp	Phe	Thr	Cys	Lys	Lys	Ile
	50					55					60				
Gly	Ser	Gly	Phe	Phe	Ser	Glu	Val	Phe	Lys	Val	Arg	His	Arg	Ala	Ser
65					70				75					80	
Gly	Gln	Val	Met	Ala	Leu	Lys	Met	Asn	Thr	Leu	Ser	Ser	Asn	Arg	Ala
			85					90					95		
Asn	Met	Leu	Lys	Glu	Val	Gln	Leu	Met	Asn	Arg	Leu	Ser	His	Pro	Asn
			100					105					110		
Ile	Leu	Arg	Phe	Met	Gly	Val	Cys	Val	His	Gln	Gly	Gln	Leu	His	Ala
		115				120					125				
Leu	Thr	Glu	Tyr	Ile	Asn	Ser	Gly	Asn	Leu	Glu	Gln	Leu	Leu	Asp	Ser
	130					135					140				
Asn	Leu	His	Leu	Pro	Trp	Thr	Val	Arg	Val	Lys	Leu	Ala	Tyr	Asp	Ile
145				150					155					160	
Ala	Val	Gly	Leu	Ser	Tyr	Leu	His	Phe	Lys	Gly	Ile	Phe	His	Arg	Asp
			165					170					175		
Leu	Thr	Ser	Lys	Asn	Cys	Leu	Ile	Lys	Arg	Asp	Glu	Asn	Gly	Tyr	Ser

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<210> 3011
<211> 3253
<212> DNA
<213> Homo sapiens
```

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<400> 3011
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120
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180
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240
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300
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360
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420
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480
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540
tctccccag ccaagcagac atccaccttc tcgaagcaga cccccatca cccgtttccc
600
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660
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720
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780
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840
cacctgctgg ccccgggggc acaggacatc tatgatgtgc ccccggttcg ggggctgctt
900

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cccagccagt atggccagga ggtgtatgac acacccccca tggctgtcaa gggccccaat
960
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1020
ccgtccaacc accacgcagt ctacgacgtt cctccatcgg tgagcaagga tgtgcccgat
1080
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2520

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 3240
 aaaaaaaaaa aaa
 3253

<210> 3012

<211> 870

<212> PRT

<213> Homo sapiens

<400> 3012

Met	Asn	His	Leu	Asn	Val	Leu	Ala	Lys	Ala	Leu	Tyr	Asp	Asn	Val	Ala
1				5				10						15	
Glu	Ser	Pro	Asp	Glu	Leu	Ser	Phe	Arg	Lys	Gly	Asp	Ile	Met	Thr	Val
			20					25					30		
Leu	Glu	Gln	Asp	Thr	Gln	Gly	Leu	Asp	Gly	Trp	Trp	Leu	Cys	Ser	Leu
		35				40						45			
His	Gly	Arg	Gln	Gly	Ile	Val	Pro	Gly	Asn	Arg	Leu	Lys	Ile	Leu	Val
	50				55						60				
Gly	Met	Tyr	Asp	Lys	Lys	Pro	Ala	Gly	Pro	Gly	Ser	Gly	Pro	Pro	Ala
65				70				75					80		
Thr	Pro	Ala	Gln	Pro	Gln	Pro	Gly	Leu	His	Ala	Pro	Ala	Pro	Pro	Ala
			85					90					95		
Ser	Gln	Tyr	Thr	Pro	Met	Leu	Pro	Asn	Thr	Tyr	Gln	Pro	Gln	Pro	Asp
		100						105				110			
Ser	Val	Tyr	Leu	Val	Pro	Thr	Pro	Ser	Lys	Ala	Gln	Gln	Gly	Leu	Tyr
	115					120						125			
Gln	Val	Pro	Gly	Pro	Ser	Pro	Gln	Phe	Gln	Ser	Pro	Pro	Ala	Lys	Gln
	130					135					140				
Thr	Ser	Thr	Phe	Ser	Lys	Gln	Thr	Pro	His	His	Pro	Phe	Pro	Ser	Pro
145				150				155					160		
Ala	Thr	Asp	Leu	Tyr	Gln	Val	Pro	Pro	Gly	Pro	Gly	Gly	Pro	Ala	Gln

2242

595 600 605
 Lys Ala Thr Ala Pro Gly Pro Glu Gly Gly Gly Thr Leu His Pro Asn
 610 615 620
 Pro Thr Asp Lys Thr Ser Ser Ile Gln Ser Arg Pro Leu Pro Ser Pro
 625 630 635 640
 Pro Lys Phe Thr Ser Gln Asp Ser Pro Asp Gly Gln Tyr Glu Asn Ser
 645 650 655
 Glu Gly Gly Trp Met Glu Asp Tyr Asp Tyr Val His Leu Gln Gly Lys
 660 665 670
 Glu Glu Phe Glu Lys Thr Gln Lys Glu Leu Leu Glu Lys Gly Asn Ile
 675 680 685
 Thr Arg Gln Gly Lys Ser Gln Leu Glu Leu Gln Gln Leu Lys Gln Phe
 690 695 700
 Glu Arg Leu Glu Gln Glu Val Ser Arg Pro Ile Asp His Asp Leu Ala
 705 710 715 720
 Asn Trp Thr Pro Ala Gln Pro Leu Ala Pro Gly Arg Thr Gly Gly Leu
 725 730 735
 Gly Pro Ser Asp Arg Gln Leu Leu Leu Phe Tyr Leu Glu Gln Cys Glu
 740 745 750
 Ala Asn Leu Thr Thr Leu Thr Asn Ala Val Asp Ala Phe Phe Thr Ala
 755 760 765
 Val Ala Thr Asn Gln Pro Pro Lys Ile Phe Val Ala His Ser Lys Phe
 770 775 780
 Val Ile Leu Ser Ala His Lys Leu Val Phe Ile Gly Asp Thr Leu Ser
 785 790 795 800
 Arg Gln Ala Lys Ala Ala Asp Val Arg Ser Gln Val Thr His Tyr Ser
 805 810 815
 Asn Leu Leu Cys Asp Leu Leu Arg Gly Ile Val Ala Thr Thr Lys Ala
 820 825 830
 Ala Ala Leu Gln Tyr Pro Ser Pro Ser Ala Ala Gln Asp Met Val Glu
 835 840 845
 Arg Val Lys Glu Leu Gly His Ser Thr Gln Gln Phe Arg Arg Val Leu
 850 855 860
 Gly Gln Leu Ala Ala Ala
 865 870

<210> 3013
 <211> 248
 <212> DNA
 <213> Homo sapiens

<400> 3013
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 120
 gaccaggtgc tggaggagca gaccaaggca gcgcagcagg ctgggtgggg cctcctcctt
 180
 gcgaggaggt ggggtggcacc tcctcgaccc acagtgatcc tgctgcgcct ggaagggggcc
 240
 atcgatgc
 248

<210> 3014

<211> 82
 <212> PRT
 <213> Homo sapiens

<400> 3014
 Xaa Arg Val Lys Gly Thr Val Val Ile Phe Asp Glu Ala His Asn Val
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 Glu Lys Met Cys Glu Glu Ser Ala Ser Phe Asp Leu Thr Pro His Asp
 20 25 30
 Leu Ala Ser Gly Leu Asp Val Ile Asp Gln Val Leu Glu Glu Gln Thr
 35 40 45
 Lys Ala Ala Gln Gln Ala Gly Trp Gly Leu Leu Leu Ala Arg Arg Trp
 50 55 60
 Val Ala Pro Pro Arg Pro Thr Val Ile Leu Leu Arg Leu Glu Gly Ala
 65 70 75 80
 Ile Asp

<210> 3015
 <211> 438
 <212> DNA
 <213> Homo sapiens

<400> 3015
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 60
 gaagacggcc ccaaggcatt ctgggggagg gaatggaaag ctgccaaca catctggtat
 120
 ccggagaagc attttcaca ctaaacttga cctgaccag ctgcacggtg actggctcca
 180
 ggaagatggg gtgaaccatc cctcctggga ccctgtgaca aaaggcaaaa gctcttgggc
 240
 aaagctgcca ggggggcttg cggggggggg gtgtgcgggt gacattgtga tttggtagac
 300
 tttggtggaa gatgtttgga aactctggta ttgaggcca acagcacgtg ctcattgtgc
 360
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 420
 tgcaacagca acgggcta
 438

<210> 3016
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 3016
 Met Ser Thr Cys Cys Trp Pro Ser Ile Pro Glu Phe Pro Asn Ile Phe
 1 5 10 15
 His Gln Ser Leu Pro Asn His Asn Val Thr Arg Thr Pro Pro Pro Arg
 20 25 30
 Lys Pro Pro Trp Gln Leu Cys Pro Arg Ala Phe Ala Phe Cys His Arg
 35 40 45
 Val Pro Gly Gly Met Val His Pro Ile Phe Leu Glu Pro Val Thr Val

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 <211> 104
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Gln Gly Leu Thr Pro Thr Pro Gly Ala Leu Pro Asn Tyr Leu Lys Val
 50 55 60
 Lys Ala Asn Arg Ala Ile Pro Gln Ala Val Thr Ser Thr Arg Leu Gly
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 Thr Thr Lys Pro Pro Cys Thr Ile Thr Pro Pro Cys Arg Ala Val Arg
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 Ser Thr Ser Pro Arg Leu Pro Thr
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<210> 3019
 <211> 882
 <212> DNA
 <213> Homo sapiens

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 <213> Homo sapiens

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 Asp Pro Ala Arg Pro Arg Phe Leu Ala Cys His His Arg Gln Thr Cys
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<210> 3021
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 <212> DNA
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<210> 3022
 <211> 94
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Pro Val Ala Gly Thr Thr Gly Ala Leu Pro His Arg Lys Ala His Phe
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<210> 3023
 <211> 1834
 <212> DNA
 <213> Homo sapiens

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<210> 3024

<211> 347

<212> PRT

<213> Homo sapiens

<400> 3024

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<210> 3025

<211> 1370

<212> DNA

<213> Homo sapiens

<400> 3025

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<210> 3026

<211> 152

<212> PRT

<213> Homo sapiens

<400> 3026

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 35           40           45
Arg Glu Leu Val Cys Lys Glu Ser Lys Lys Thr Phe Lys Ala Thr Ile
 50           55           60
Ala Met Ser Gln Glu Phe Pro Leu Gly Ile Glu Leu Leu Leu Asn Val
 65           70           75           80
Leu Glu Val Val Ala Pro Phe Lys His Phe Asn Lys Leu Arg Glu Phe
 85           90           95
Val Gln Met Lys Leu Pro Pro Gly Phe Pro Val Lys Leu Asp Ile Pro
100           105           110
Val Phe Pro Thr Ile Thr Ala Thr Val Thr Phe Gln Glu Phe Arg Tyr
115           120           125
Asp Glu Phe Asp Gly Ser Ile Phe Thr Ile Pro Asp Asp Tyr Lys Glu
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Asp Pro Ser Arg Phe Pro Asp Leu
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<210> 3027

<211> 1154

<212> DNA

<213> Homo sapiens

<400> 3027

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720
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780

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<210> 3028
<211> 331
<212> PRT
<213> Homo sapiens

<400> 3028
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35 40 45
Glu Asn Gly Glu Gly Glu Ile Glu Asp Glu Glu Glu Gly Tyr Asp
50 55 60
Asp Asp Asp Asp Asp Trp Asp Trp Asp Glu Gly Val Gly Lys Leu Ala
65 70 75 80
Lys Gly Tyr Val Trp Asn Gly Gly Ser Asn Pro Gln Ala Asn Arg Gln
85 90 95
Thr Ser Asp Ser Ser Ser Ala Lys Met Ser Thr Pro Ala Asp Lys Val
100 105 110
Leu Arg Lys Phe Glu Asn Lys Ile Asn Leu Asp Lys Leu Asn Val Thr
115 120 125
Asp Ser Val Ile Asn Lys Val Thr Glu Lys Ser Arg Gln Lys Glu Ala
130 135 140
Asp Met Tyr Arg Ile Lys Asp Lys Ala Asp Arg Ala Thr Val Glu Gln
145 150 155 160
Val Leu Asp Pro Arg Thr Arg Met Ile Leu Phe Lys Met Leu Thr Arg
165 170 175
Gly Ile Ile Thr Glu Ile Asn Gly Cys Ile Ser Thr Gly Lys Glu Ala
180 185 190
Asn Val Tyr His Ala Ser Thr Ala Asn Gly Glu Ser Arg Ala Ile Lys
195 200 205
Ile Tyr Lys Thr Ser Ile Leu Val Phe Lys Asp Arg Asp Lys Tyr Val
210 215 220
Ser Gly Glu Phe Arg Phe Arg His Gly Tyr Cys Lys Gly Asn Pro Arg
225 230 235 240
Lys Met Val Lys Thr Trp Ala Glu Lys Glu Met Arg Asn Leu Ile Arg
245 250 255
Leu Asn Thr Ala Glu Ile Pro Cys Pro Glu Pro Ile Met Leu Arg Ser

	260		265		270										
His	Val	Leu	Val	Met	Ser	Phe	Ile	Gly	Lys	Asp	Asp	Ile	Ser	Phe	His
	275		280		285										
Ser	Arg	Pro	Ala	Pro	Leu	Leu	Lys	Asn	Val	Gln	Leu	Ser	Glu	Ser	Lys
	290		295		300										
Ala	Arg	Glu	Leu	Tyr	Leu	Gln	Val	Ile	Gln	Tyr	Met	Arg	Arg	Met	Tyr
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<210> 3029

<211> 344

<212> DNA

<213> Homo sapiens

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180
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240
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<210> 3030

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3030

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		20					25						30		
Arg	Ile	Lys	Leu	Asn	Asp	Arg	Met	Thr	Phe	Pro	Glu	Glu	Leu	Asp	Met
	35				40						45				
Ser	Thr	Phe	Ile	Asp	Val	Glu	Asp	Glu	Lys	Ser	Pro	Gln	Thr	Glu	Ser
50				55						60					
Cys	Thr	Asp	Arg	Gly	Ala	Glu	Asn	Glu	Gly	Ser	Cys	His	Ser	Asp	Gln
65			70					75						80	
Met	Ser	Asn	Asp	Phe	Ser	Asn	Asp	Asp	Gly	Val	Asp	Glu	Gly	Ile	Cys
		85				90						95			
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Lys	Asn														

<210> 3031

<211> 567

<212> DNA

<213> Homo sapiens

<400> 3031

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180
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240
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300
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360
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420
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<210> 3032

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3032

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			20					25					30		
Thr	Pro	Arg	Met	Asn	Arg	Arg	Leu	Val	Gly	Pro	Asp	Val	Ile	Pro	Leu
			35				40					45			
Pro	His	Ile	Tyr	Gly	Ala	Arg	Ile	Lys	Gly	Val	Glu	Val	Phe	Cys	Pro
			50			55					60				
Leu	Asp	Pro	Pro	Pro	Pro	Tyr	Glu	Ala	Val	Val	Ser	Gln	Met	Asp	Gln
65					70				75					80	
Glu	Gln	Gly	Ser	Ser	Phe	Gln	Met	Ser	Glu	Gly	Ser	Glu	Ala	Ala	Val
			85					90					95		
Ile	Pro	Leu	Asp	Leu	Gly	Cys	Thr	Gln	Val	Thr	Gln	Asp	Gly	Asp	Ile
			100					105					110		
Pro	Asn	Ile	Pro	Ala	Glu	Glu	Asn	Ala	Ser	Thr	Ser	Thr	Pro	Ser	Ser
			115				120					125			
Thr	Leu	Val	Arg	Pro	Ile	Arg	Ser	Arg	Arg	Ala	Leu	Pro	Pro	Leu	Arg
			130			135					140				
Thr	Arg	Ser	Lys	Ser	Asp	Pro	Val	Leu	His	Pro	Ser	Glu	Glu	Arg	Ala
145					150				155					160	
Ala	Pro	Val	Leu	Ser	Cys	Glu	Ala	Ala	Thr	Gln	Thr	Glu	Arg	Arg	Leu
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185

<210> 3033
 <211> 821
 <212> DNA
 <213> Homo sapiens

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 240
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 300
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 360
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<210> 3034
 <211> 221
 <212> PRT
 <213> Homo sapiens

<400> 3034
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 20 25 30
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 35 40 45
 Tyr Cys Ile Ala Asp Leu Ser Lys Tyr Lys Glu Asn Lys Phe Gly Phe
 50 55 60
 Arg Trp Arg Val Glu Lys Glu Val Ile Ser Gly Lys Gly Gln Phe Phe
 65 70 75 80
 Cys Gly Asn Lys Tyr Cys Asp Lys Lys Glu Gly Leu Lys Ser Trp Glu

				85					90					95					
Val	Asn	Phe	Gly	Tyr	Ile	Glu	His	Gly	Glu	Lys	Arg	Asn	Ala	Leu	Val				
			100						105					110					
Lys	Leu	Arg	Leu	Cys	Gln	Glu	Cys	Ser	Ile	Lys	Leu	Asn	Phe	His	His				
		115					120						125						
Arg	Arg	Lys	Glu	Ile	Lys	Ser	Lys	Lys	Arg	Lys	Asp	Lys	Thr	Lys	Lys				
		130					135					140							
Asp	Cys	Glu	Glu	Ser	Ser	His	Lys	Lys	Ser	Arg	Leu	Ser	Ser	Ala	Glu				
145						150				155					160				
Glu	Ala	Ser	Lys	Lys	Lys	Asp	Lys	Gly	His	Ser	Ser	Ser	Lys	Lys	Ser				
				165					170					175					
Glu	Asp	Ser	Leu	Leu	Arg	Asn	Ser	Asp	Glu	Glu	Glu	Ser	Ala	Ser	Glu				
		180						185					190						
Ser	Glu	Leu	Trp	Lys	Gly	Pro	Leu	Pro	Glu	Thr	Asp	Glu	Lys	Ser	Gln				
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Glu	Glu	Glu	Phe	Asp	Glu	Tyr	Phe	Gln	Asp	Leu	Phe	Leu							
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<210> 3035

<211> 878

<212> DNA

<213> Homo sapiens

<400> 3035

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 420
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 720
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 780
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 878

<210> 3036
 <211> 65
 <212> PRT
 <213> Homo sapiens

<400> 3036
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 20 25 30
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 35 40 45
 Val Ile Leu Phe Leu Glu Gly Asn Arg Asp Pro Gly Gly Arg Gly Trp
 50 55 60
 Pro
 65

<210> 3037
 <211> 3538
 <212> DNA
 <213> Homo sapiens

<400> 3037
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<210> 3038

<211> 697

<212> PRT

<213> Homo sapiens

<400> 3038

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Cys	Met	Asn	Met	Asn	Thr	Lys	Ala	Asn	Arg	Lys	Lys	Leu	Val	Arg	Ala
			20					25					30		
Leu	Phe	Ile	Val	Pro	Arg	Gln	Arg	Leu	Asp	Leu	Leu	Pro	Phe	Tyr	Ala
			35				40					45			
Arg	Leu	Val	Ala	Thr	Leu	His	Pro	Cys	Met	Ser	Asp	Val	Ala	Glu	Asp
			50			55				60					
Leu	Cys	Ser	Met	Leu	Arg	Gly	Asp	Phe	Arg	Phe	His	Val	Arg	Lys	Lys
65				70				75					80		
Asp	Gln	Ile	Asn	Ile	Glu	Thr	Lys	Asn	Lys	Thr	Val	Arg	Phe	Ile	Gly
			85				90					95			
Glu	Leu	Thr	Lys	Phe	Lys	Met	Phe	Thr	Lys	Asn	Asp	Thr	Leu	His	Cys

			100					105					110			
Leu	Lys	Met	Leu	Leu	Ser	Asp	Phe	Ser	His	His	His	Ile	Glu	Met	Ala	
		115					120					125				
Cys	Thr	Leu	Leu	Glu	Thr	Cys	Gly	Arg	Phe	Leu	Phe	Arg	Ser	Pro	Glu	
	130					135					140					
Ser	His	Leu	Arg	Thr	Ser	Val	Leu	Leu	Glu	Gln	Met	Met	Arg	Lys	Lys	
145					150					155					160	
Gln	Ala	Met	His	Leu	Asp	Ala	Arg	Tyr	Val	Thr	Met	Val	Glu	Asn	Ala	
			165					170						175		
Tyr	Tyr	Tyr	Cys	Asn	Pro	Pro	Pro	Ala	Glu	Lys	Thr	Val	Lys	Lys	Lys	
		180						185					190			
Arg	Pro	Pro	Leu	Gln	Glu	Tyr	Val	Arg	Lys	Leu	Leu	Tyr	Lys	Asp	Leu	
	195						200					205				
Ser	Lys	Val	Thr	Thr	Glu	Lys	Val	Leu	Arg	Gln	Met	Arg	Lys	Leu	Pro	
	210					215					220					
Trp	Gln	Asp	Gln	Glu	Val	Lys	Asp	Tyr	Val	Ile	Cys	Cys	Met	Ile	Asn	
225					230					235					240	
Ile	Trp	Asn	Val	Lys	Tyr	Asn	Ser	Ile	His	Cys	Val	Ala	Asn	Leu	Leu	
			245					250						255		
Ala	Gly	Leu	Val	Leu	Tyr	Gln	Glu	Asp	Val	Gly	Ile	His	Val	Val	Asp	
		260					265						270			
Gly	Val	Leu	Glu	Asp	Ile	Arg	Leu	Gly	Met	Glu	Val	Asn	Gln	Pro	Lys	
	275						280					285				
Phe	Asn	Gln	Arg	Arg	Ile	Ser	Ser	Ala	Lys	Phe	Leu	Gly	Glu	Leu	Tyr	
	290					295					300					
Asn	Tyr	Arg	Met	Val	Glu	Ser	Ala	Val	Ile	Phe	Arg	Thr	Leu	Tyr	Ser	
305					310					315					320	
Phe	Thr	Ser	Phe	Gly	Val	Asn	Pro	Asp	Gly	Ser	Pro	Ser	Ser	Leu	Asp	
			325					330						335		
Pro	Pro	Glu	His	Leu	Phe	Arg	Ile	Arg	Leu	Val	Cys	Thr	Ile	Leu	Asp	
		340						345					350			
Thr	Cys	Gly	Gln	Tyr	Phe	Asp	Arg	Gly	Ser	Ser	Lys	Arg	Lys	Leu	Asp	
	355					360						365				
Cys	Phe	Leu	Val	Tyr	Phe	Gln	Arg	Tyr	Val	Trp	Trp	Lys	Lys	Ser	Leu	
	370					375					380					
Glu	Val	Trp	Thr	Lys	Asp	His	Pro	Phe	Pro	Ile	Asp	Ile	Asp	Tyr	Met	
385					390					395					400	
Ile	Ser	Asp	Thr	Leu	Glu	Leu	Leu	Arg	Pro	Lys	Ile	Lys	Leu	Cys	Asn	
			405					410						415		
Ser	Leu	Glu	Glu	Ser	Ile	Arg	Gln	Val	Gln	Asp	Leu	Glu	Arg	Glu	Phe	
		420					425						430			
Leu	Ile	Lys	Leu	Gly	Leu	Val	Asn	Asp	Lys	Asp	Ser	Lys	Asp	Phe	Met	
	435						440									

530	535	540
Met Met Leu Glu Asn Leu Gln Gln Arg Ser Gly Glu Ser Val Lys Val		
545	550	555
His Gln Leu Asp Val Ala Ile Pro Leu His Leu Lys Ser Gln Leu Arg		560
	565	570
Lys Gly Pro Pro Leu Gly Gly Gly Glu Gly Glu Ala Glu Ser Ala Asp		575
	580	585
Thr Met Pro Phe Val Met Leu Thr Arg Lys Gly Asn Lys Gln Gln Phe		590
	595	600
Lys Ile Leu Asn Val Pro Met Ser Ser Gln Leu Ala Ala Asn His Trp		605
610	615	620
Asn Gln Gln Gln Ala Glu Gln Glu Glu Arg Met Arg Met Lys Lys Leu		
625	630	635
Thr Leu Asp Ile Asn Glu Arg Gln Glu Gln Glu Asp Tyr Gln Glu Met		640
	645	650
Leu Gln Ser Leu Ala Gln Arg Pro Ala Pro Ala Asn Thr Asn Arg Glu		655
	660	665
Arg Arg Pro Arg Tyr Gln His Pro Lys Gly Ala Pro Asn Ala Asp Leu		670
	675	680
Ile Phe Lys Thr Gly Gly Arg Arg Arg		685
690	695	

<210> 3039

<211> 1836

<212> DNA

<213> Homo sapiens

<400> 3039

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120
tcgttagaat ctctcaccct gcttctcggt ctgatctgtg caagctcagt ctcttctgag
180
cctgcagcta cctccatccc tcatcgtagt gcaggccaaa ccaaatttta taaaattaac
240
aatttaaggt taaataagct taaataaggg tgttaaatac aagacacttc atcaaagctt
300
ctgtacaaag ataaacaaat ctggcattgt acaagtgggt ccgctggctc acagcacaca
360
gggaagttct agtgagtaag cagattcact ctcatctctt tccagcagag caactataca
420
aaagtgaact aagagttgaa gtgactactg accactcggt gagccattta caaggcatat
480
gtatcttttt tttgttttta atcagaacac tgttaatat caggcaccat ttgttcctgc
540
aaataaataa gtctctaagg taactgcac tgaactagt ttaaacacaa cagtgccttt
600
tttttttttt aatcccccca caaagctttt ccaactatgt actatgcctc ctttcttatt
660
gctatggtaa tgtggctgtg gaaataaaac tactgtacat ccaaaaaaat agagcacctt
720
taacattaaa gtatatgtct gattatttgt tctcatgttt attttacaat actaaagccc
780

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aaactatggt aaattgcttt acatctctac caggtcacct gatatacagg aaataaaaact
 840
 caactatctt ccctcttgag gtaagcccaa gccagagcac tgtttttagca gagtctaaaa
 900
 gaaaaagggtc tcaactgtcg ccagggttta cattcatctt cacaccagga gttacattca
 960
 ttcattcttca catcggcgct gctctctgcc gtgggtaccg agaaagagtc gaggtccct
 1020
 atcctgctgt ggtgaatggt gctacacaga atggaacagc aaaaacatct acgattgggt
 1080
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 1140
 ggtcccttga tgagggtgagg attggctaag attttttgtc gatgggtggg aaaaaccatt
 1200
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 1260
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 1320
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 1380
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 1440
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 1500
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 1560
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 1620
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 1680
 aatcagctgg aattaattct tcgacaactc cagaccgacc ttcggaagga aaaacaagac
 1740
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 1836

<210> 3040

<211> 142

<212> PRT

<213> Homo sapiens

<400> 3040

Thr	Leu	Cys	His	Cys	Leu	Asp	Leu	His	Ile	Arg	Ala	Ala	Leu	Met	Pro
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Leu	Pro	Asp	Thr	Ala	Thr	Gly	Leu	Asp	Trp	Thr	His	Leu	Val	Asp	Ala
			20					25					30		
Ala	Arg	Ala	Phe	Glu	Asp	Gln	Arg	Val	Ala	Ser	Phe	Cys	Thr	Leu	Thr
		35					40					45			
Asp	Met	Gln	His	Gly	Gln	Asp	Leu	Glu	Gly	Ala	Gln	Glu	Leu	Pro	Leu
	50					55					60				
Cys	Val	Asp	Pro	Gly	Ser	Gly	Lys	Glu	Phe	Met	Asp	Thr	Thr	Gly	Glu
65				70				75						80	
Arg	Ser	Pro	Ser	Pro	Leu	Thr	Gly	Lys	Val	Asn	Gln	Leu	Glu	Leu	Ile

				85						90					95				
Leu	Arg	Gln	Leu	Gln	Thr	Asp	Leu	Arg	Lys	Glu	Lys	Gln	Asp	Lys	Ala				
			100						105					110					
Gly	Leu	Gln	Ala	Glu	Val	Gln	His	Leu	Arg	Gln	Asp	Asn	Met	Arg	Leu				
		115					120					125							
Gln	Glu	Glu	Ser	Gln	Thr	Ala	Thr	Ala	Gln	Leu	Arg	Lys	Leu						
		130					135					140							

<210> 3041

<211> 1512

<212> DNA

<213> Homo sapiens

<400> 3041

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120
ccctcaacgt ccgcaggcgc gatgaaggca ctgatcttag tggggggcta tgggacgcgg
180
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240
ttgctgcacc aagtggaggc gctagccgcg gcaggcgtgg accacgtgat cctggccgtg
300
agctacatgt cgcaggtgct ggagaaggaa atgaaggcac aggagcagag gctgggaatc
360
cgaatctcca tgtcccatga agaggagcct ttggggacag ctggggcccct ggcgctggcc
420
cgtgacctac tctctgagac tgcagaccct ttcttcgtcc tcaacagtga cgtgatctgc
480
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600
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660
ggcatgtaca tcctgagccc tgcagtgctg cggcgcatcc agctgcagcc tacgtccatt
720
gagaaggagg tcttccccat tatggccaag gaggggcagc tatatgccat ggagttacag
780
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840
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900
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960
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1020
gatgcccgga tccgttccca ttcctggctt gagtcctgca ttgtgggctg gcgctgccgc
1080
gtgggtcagt gggtagcat ggagaacgtg acagtgctgg gtgaggacgt catagttaat
1140
gatgagctct acctcaacgg agccagcgtg ctgccccaca agtctattgg cgagtcagtg
1200

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ccagagcctc gtatcatcat gtgaggggat gcagtggggc tggccgagcc ccggttttcc
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 1320
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 1380
 ctggcaggat ccctgctggg cacacccac aaacccact ccctcaagaa gggccagggc
 1440
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 1500
 aaaaaaaaaa aa
 1512

<210> 3042
 <211> 360
 <212> PRT
 <213> Homo sapiens

<400> 3042
 Met Lys Ala Leu Ile Leu Val Gly Gly Tyr Gly Thr Arg Leu Arg Pro
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 Leu Thr Leu Ser Thr Pro Lys Pro Leu Val Asp Phe Cys Asn Lys Pro
 20 25 30
 Ile Leu Leu His Gln Val Glu Ala Leu Ala Ala Ala Gly Val Asp His
 35 40 45
 Val Ile Leu Ala Val Ser Tyr Met Ser Gln Val Leu Glu Lys Glu Met
 50 55 60
 Lys Ala Gln Glu Gln Arg Leu Gly Ile Arg Ile Ser Met Ser His Glu
 65 70 75 80
 Glu Glu Pro Leu Gly Thr Ala Gly Pro Leu Ala Leu Ala Arg Asp Leu
 85 90 95
 Leu Ser Glu Thr Ala Asp Pro Phe Phe Val Leu Asn Ser Asp Val Ile
 100 105 110
 Cys Asp Phe Pro Phe Gln Ala Met Val Gln Phe His Arg His His Gly
 115 120 125
 Gln Glu Gly Ser Ile Leu Val Thr Lys Val Glu Glu Pro Ser Lys Tyr
 130 135 140
 Gly Val Val Val Cys Glu Ala Asp Thr Gly Arg Ile His Arg Phe Val
 145 150 155 160
 Glu Lys Pro Gln Val Phe Val Ser Asn Lys Ile Asn Ala Gly Met Tyr
 165 170 175
 Ile Leu Ser Pro Ala Val Leu Arg Arg Ile Gln Leu Gln Pro Thr Ser
 180 185 190
 Ile Glu Lys Glu Val Phe Pro Ile Met Ala Lys Glu Gly Gln Leu Tyr
 195 200 205
 Ala Met Glu Leu Gln Gly Phe Trp Met Asp Ile Gly Gln Pro Lys Asp
 210 215 220
 Phe Leu Thr Gly Met Cys Leu Phe Leu Gln Ser Leu Arg Gln Lys Gln
 225 230 235 240
 Pro Glu Arg Leu Cys Ser Gly Pro Gly Ile Val Gly Asn Val Leu Val
 245 250 255
 Asp Pro Ser Ala Arg Ile Gly Gln Asn Cys Ser Ile Gly Pro Asn Val
 260 265 270
 Ser Leu Gly Pro Gly Val Val Val Glu Asp Gly Val Cys Ile Arg Arg

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      275      280      285
Cys Thr Val Leu Arg Asp Ala Arg Ile Arg Ser His Ser Trp Leu Glu
      290      295      300
Ser Cys Ile Val Gly Trp Arg Cys Arg Val Gly Gln Trp Val Arg Met
      305      310      315      320
Glu Asn Val Thr Val Leu Gly Glu Asp Val Ile Val Asn Asp Glu Leu
      325      330      335
Tyr Leu Asn Gly Ala Ser Val Leu Pro His Lys Ser Ile Gly Glu Ser
      340      345      350
Val Pro Glu Pro Arg Ile Ile Met
      355      360

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<210> 3043
 <211> 394
 <212> DNA
 <213> Homo sapiens

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<400> 3043
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120
cttctctgac ctactccaa ctcacgtgtc tttgacactt taagggactt cctgttttag
180
ggctcttctgg ctgggtgtca ttgaatgggc agtgattctc taactttaga ctgatgttcc
240
ccagcctttg tttggggact cggaggcaga gtagacagtt acccttacct ctgggttggg
300
gagggtcata ttcttggtat ccccaggagg tcaacagggg cttcattttt ctgagggact
360
agaggggtctt gtggagctcc tgggacagag atct
394

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<210> 3044
 <211> 115
 <212> PRT
 <213> Homo sapiens

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<400> 3044
Met Lys Pro Leu Leu Thr Ser Trp Gly Tyr Gln Glu Tyr Asp Pro Pro
1      5      10      15
Gln Pro Arg Gly Lys Gly Asn Cys Leu Leu Cys Leu Arg Val Pro Lys
20      25      30
Gln Arg Leu Gly Asn Ile Ser Leu Lys Leu Glu Asn His Cys Pro Phe
35      40      45
Asn Asp Thr Gln Pro Glu Asp Pro Lys Thr Gly Ser Pro Leu Lys Cys
50      55      60
Gln Arg His Val Ser Trp Ser Glu Val Arg Glu Ala Asp Ser Gly Leu
65      70      75      80
Leu Leu Gly Gln Thr Pro Val Lys Arg Lys Arg Trp His His Glu Thr
85      90      95
Ser Ser Phe Ser Pro Cys Leu Trp Leu Lys Ala Arg Ala Ser Arg Ser
100      105      110
Lys Glu Ile

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115

<210> 3045
 <211> 605
 <212> DNA
 <213> Homo sapiens

<400> 3045
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 120
 tcttgggagc cgctggcttg cttatgcaga aaacaagttg attcgatgtc atcagtcctcg
 180
 tgggtggagcc tgtggagaca acattcagtc ttatactgcc acagtcatta gtgctgctaa
 240
 aacattgaaa agtggcctga caatggtagg gaaagtggg actcagctga caggcacact
 300
 gccttcaggt gtgacagaag atgatgttgc catccacagt aattcacggc ggagtccttt
 360
 ggtcccaggc atcatcacag ttattgacac cgaaaccgtg gagagggcca ggtgtttgtg
 420
 agtgaggatc ttgacagtga tggcattgtg gccacttcc ctgcccata gaagccagtg
 480
 tgctgcatgg cttttaatac aagtggaaatg cttctagtca caacagacac ccttggccat
 540
 gactttcatg tcttccaaat tctgactcat ccttgggtcct catctacgga gagacgacaa
 600
 cgcgt
 605

<210> 3046
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 3046
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 Ser Asp Gly Ile Val Ala His Phe Pro Ala His Glu Lys Pro Val Cys
 20 25 30
 Cys Met Ala Phe Asn Thr Ser Gly Met Leu Leu Val Thr Thr Asp Thr
 35 40 45
 Leu Gly His Asp Phe His Val Phe Gln Ile Leu Thr His Pro Trp Ser
 50 55 60
 Ser Ser Thr Glu Arg Arg Gln Arg
 65 70

<210> 3047
 <211> 391
 <212> DNA
 <213> Homo sapiens

<400> 3047

atttttgagg agaggaagaa tgaaatgacc caagtcatta cccgaaccca agaggagaaa
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 120
 ttggttgagt caggaattca gtttatggat gagccagaaa tggcagtgtt tctgcagaat
 180
 gccaaaaccc tgctaaaaaa aatctcggaa gcatcaaagg catttcagat ggagaaaata
 240
 gaacatggct atgagaacat gaaccacttc acagtcaacc tcaatagaga agaaaagata
 300
 atacgtgaaa ttgactttta cagagaagat gaagatgaag aagaagaaga aggcggagaa
 360
 ggagaaaaag aagagaagga gaagtgggag a
 391

<210> 3048

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3048

Met	Thr	Gln	Val	Ile	Thr	Arg	Thr	Gln	Glu	Glu	Lys	Leu	Glu	His	Val
1				5				10						15	
Arg	Ala	Leu	Ile	Lys	Lys	Tyr	Ser	Asp	His	Leu	Glu	Asn	Val	Ser	Lys
			20					25					30		
Leu	Val	Glu	Ser	Gly	Ile	Gln	Phe	Met	Asp	Glu	Pro	Glu	Met	Ala	Val
		35					40					45			
Phe	Leu	Gln	Asn	Ala	Lys	Thr	Leu	Leu	Lys	Lys	Ile	Ser	Glu	Ala	Ser
	50					55					60				
Lys	Ala	Phe	Gln	Met	Glu	Lys	Ile	Glu	His	Gly	Tyr	Glu	Asn	Met	Asn
65				70						75				80	
His	Phe	Thr	Val	Asn	Leu	Asn	Arg	Glu	Glu	Lys	Ile	Ile	Arg	Glu	Ile
			85							90				95	
Asp	Phe	Tyr	Arg	Glu	Asp	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Gly	Gly	Glu
			100					105					110		
Gly	Glu	Lys	Glu	Glu	Lys	Glu	Lys	Trp	Glu						
			115					120							

<210> 3049

<211> 599

<212> DNA

<213> Homo sapiens

<400> 3049

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 120
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 180
 tcgatattgt acctggaagg ctcggctctt gtgtttgagg acatcttcag attgattgcg
 240
 ttctactgtg tcagtagaga cttactgccc ttcacactgc ggctacccca ggccatcctt
 300

gaggccagca gcttcacgga ccttgagacc atcgccaacc tgggtctggg tttctgggac
 360
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 420
 cccggattcc ccctagtctc cagcctcagg cccacagccc atgacgcaaa ctgtgcctgt
 480
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 540
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 599

<210> 3050

<211> 177

<212> PRT

<213> Homo sapiens

<400> 3050

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1				5					10					15	
Val	His	Phe	Pro	Ser	Leu	Asn	Glu	Ser	Ser	Ala	Glu	Val	Leu	Glu	Tyr
			20					25					30		
Thr	Ile	Lys	Glu	Glu	Lys	Ser	Ile	Leu	Tyr	Leu	Glu	Gly	Ser	Ala	Leu
		35					40					45			
Val	Phe	Glu	Asp	Ile	Phe	Arg	Leu	Ile	Ala	Phe	Tyr	Cys	Val	Ser	Arg
	50					55				60					
Asp	Leu	Leu	Pro	Phe	Thr	Leu	Arg	Leu	Pro	Gln	Ala	Ile	Leu	Glu	Ala
65					70					75				80	
Ser	Ser	Phe	Thr	Asp	Leu	Glu	Thr	Ile	Ala	Asn	Leu	Gly	Leu	Gly	Phe
			85					90					95		
Trp	Asp	Ser	Ser	Leu	Asn	Pro	Pro	Gln	Glu	Arg	Gly	Lys	Pro	Ala	Glu
			100					105					110		
Pro	Pro	Arg	Asp	Arg	Ala	Pro	Gly	Phe	Pro	Leu	Val	Ser	Ser	Leu	Arg
		115					120					125			
Pro	Thr	Ala	His	Asp	Ala	Asn	Cys	Ala	Cys	Glu	Ile	Glu	Leu	Ser	Val
		130				135					140				
Gly	Asn	Asp	Arg	Leu	Trp	Phe	Val	Asn	Pro	Ile	Phe	Ile	Glu	Asp	Cys
145				150				155						160	
Ser	Ser	Ala	Leu	Pro	Thr	Asp	Gln	Pro	Pro	Leu	Gly	Asn	Cys	Pro	Ser
			165					170						175	

Arg

<210> 3051

<211> 820

<212> DNA

<213> Homo sapiens

<400> 3051

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 120
 tgaagactct caggttacca gcacaatata cccctacat tctcctcaca agggactccc
 180

tcctcggcca ccgtcgcaca acaggcctcc tcctccccag tccttgagg gactccgaca
 240
 gatgcactat caccgncaac gactatgaca agtcacccat caagcccaaa atgtggagtg
 300
 agtcctcttt agatgaaccc tatgagaagg tcaagaagcg ctctctcac agccattcca
 360
 gcagccacaa gcgcttcccc agcacaggaa gctgtgcgga agccggcgga ggaagcaact
 420
 ccttgacaaa cagccccatc cgcggcctcc cgcactggaa ctcccagtc agcatgccgt
 480
 ccacgccaga cctgcgggtc cggagtcccc actacgtcca ttccacgagg tcggtggaca
 540
 tcagccccac ccgactgcac agcctcgcac tgcactttag gcaccggagc tccagcctgg
 600
 agtcccaggg caagctcctg ggctcggaaa acgacaccgg gagccccgac ttctacaccc
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 720
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 780
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 820

<210> 3052
 <211> 62
 <212> PRT
 <213> Homo sapiens

<400> 3052
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 Gly Thr Pro Ser Ser Ala Thr Val Ala Gln Gln Ala Ser Ser Ser Pro
 20 25 30
 Val Pro Gly Gly Thr Pro Thr Asp Ala Leu Ser Pro Xaa Thr Thr Met
 35 40 45
 Thr Ser His Pro Ser Ser Pro Lys Cys Gly Val Ser Pro Leu
 50 55 60

<210> 3053
 <211> 2625
 <212> DNA
 <213> Homo sapiens

<400> 3053
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<210> 3054
 <211> 417
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Val Pro Thr Trp Asp Thr Ile Arg Asp Glu Glu Asp Val Leu Asp Glu
 50 55 60
 Leu Leu Gln Tyr Leu Gly Val Thr Ser Pro Glu Cys Leu Gln Arg Thr
 65 70 75 80
 Gly Ile Ser Leu Asn Ile Pro Ala Pro Gln Pro Val Cys Ile Ser Glu
 85 90 95
 Lys Gln Glu Asn Asp Val Ile Asn Ala Ile Leu Lys Gln His Thr Glu
 100 105 110
 Glu Lys Glu Phe Val Glu Lys His Phe Asn Asp Leu Asn Met Lys Ala
 115 120 125
 Val Glu Gln Asp Glu Pro Ile Pro Gln Lys Pro Gln Ser Ala Phe Tyr
 130 135 140
 Tyr Cys Arg Leu Leu Leu Ser Ile Leu Gly Met Asn Ser Trp Asp Lys
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 165 170 175
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<210> 3055
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<212> DNA
<213> Homo sapiens
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360
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 720
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 780
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<210> 3056
 <211> 195
 <212> PRT
 <213> Homo sapiens

<400> 3056
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 35 40 45
 Ser Glu His Gly Thr Thr Val Asp Asn Val Leu Tyr Ser Cys Asp Phe
 50 55 60
 Ser Glu Lys Thr Pro Pro Thr Pro Pro Ser Ser Ile Val Ala Lys Val
 65 70 75 80
 Gln Ser Val Ile Arg Arg Arg Arg His Gln Lys Gln Asp Glu Glu Pro
 85 90 95
 Ser Glu Glu Ala Ala Met Met Ser Ser Gln Ala Gln Gly Pro Gln Arg
 100 105 110
 Arg Pro Cys Asn Cys Lys Ala Ser Ser Ser Ser Leu Ile Gly Gly Ser
 115 120 125
 Gly Ala Gly Trp Glu Gly Thr Ala Leu Leu His His Gly Ser Tyr Ile
 130 135 140
 Lys Leu Gly Cys Leu Gln Phe Val Phe Ser Ile Thr Glu Phe Ala Thr
 145 150 155 160
 Lys Gln Pro Lys Gly Asp Ala Ser Leu Leu Gln Asp Gly Val Leu Ala
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 Ser Val Pro
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<210> 3057
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 <212> DNA
 <213> Homo sapiens

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<210> 3058

<211> 298

<212> PRT

<213> Homo sapiens

<400> 3058

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Ala	Arg	Arg	Ala	Arg	Lys	Val	Phe	Thr	Val	Ile	Glu	Pro	Val	Asp	Ile
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Asn	Thr	Pro	Ala	Leu	Leu	Ala	Pro	Gln	Ala	Gly	Ala	Arg	Glu	Lys	Val
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Ala	Arg	Ser	Trp	Tyr	Cys	Asn	Arg	Gly	Leu	Val	Ser	Leu	Ser	Ala	Lys
65					70				75					80	
Ile	Asp	Arg	Lys	Gly	Tyr	Thr	Pro	Gly	Glu	Val	Ile	Pro	Val	Phe	Ala
			85						90					95	
Glu	Ile	Asp	Asn	Gly	Ser	Thr	Arg	Pro	Val	Leu	Pro	Arg	Ala	Ala	Val
			100					105					110		
Val	Gln	Thr	Gln	Thr	Phe	Met	Ala	Arg	Gly	Ala	Arg	Lys	Gln	Lys	Arg
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			130			135					140				
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145					150				155					160	
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			165					170					175		
Val	Asp	Ile	Pro	Gly	Thr	Ser	Lys	Leu	Leu	Leu	Glu	Leu	Pro	Leu	Val
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1020

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<210> 3060
 <211> 334
 <212> PRT
 <213> Homo sapiens

<400> 3060
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 50 55 60
 Arg Arg Arg His Arg Ser Ser Ser Ser Ser Tyr Gly Ser Arg Arg
 65 70 75 80
 Lys Arg Ser Arg Ser Arg Ser Arg Gly Arg Gly Lys Ser Tyr Arg Val
 85 90 95
 Gln Arg Ser Arg Ser Lys Ser Arg Thr Arg Arg Ser Arg Ser Arg Pro
 100 105 110
 Arg Leu Arg Ser His Ser Arg Ser Ser Glu Arg Ser Ser His Arg Arg
 115 120 125
 Thr Arg Ser Arg Ser Arg Asp Arg Glu Arg Arg Lys Gly Arg Asp Lys
 130 135 140
 Glu Lys Arg Glu Lys Glu Lys Asp Lys Gly Lys Asp Lys Glu Leu His
 145 150 155 160
 Asn Ile Lys Arg Gly Glu Ser Gly Asn Ile Lys Ala Gly Leu Glu His
 165 170 175
 Leu Pro Pro Ala Glu Gln Ala Lys Ala Arg Leu Gln Leu Val Leu Glu
 180 185 190
 Ala Ala Ala Lys Ala Asp Glu Ala Leu Lys Ala Lys Glu Arg Asn Glu
 195 200 205
 Glu Glu Ala Lys Arg Arg Lys Glu Glu Asp Gln Ala Thr Leu Val Glu
 210 215 220
 Gln Val Lys Arg Val Lys Glu Ile Glu Ala Ile Glu Ser Asp Ser Phe
 225 230 235 240
 Val Gln Gln Thr Phe Arg Ser Ser Lys Glu Val Lys Lys Ser Val Glu
 245 250 255
 Pro Ser Glu Val Lys Gln Ala Thr Ser Thr Ser Gly Pro Ala Ser Ala

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Val	Ala	Asp	Pro	Pro	Ser	Thr	Glu	Lys	Glu	Ile	Asp	Pro	Thr	Ser	Ile
	275		280		285										
Pro	Thr	Ala	Ile	Lys	Tyr	Gln	Asp	Asp	Asn	Ser	Leu	Ala	His	Pro	Asn
	290		295		300										
Leu	Phe	Ile	Glu	Lys	Ala	Asp	Ala	Glu	Glu	Lys	Trp	Phe	Lys	Arg	Leu
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<210> 3061

<211> 1554

<212> DNA

<213> Homo sapiens

<400> 3061

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1140

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<210> 3062
 <211> 146
 <212> PRT
 <213> Homo sapiens

<400> 3062
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 35 40 45
 Gly Gly Thr Pro Ala Phe Leu Pro Ser Ser Leu Ser Pro Gln Ser Ser
 50 55 60
 Leu Pro Ala Ser Arg Ala Leu Ala Thr Pro Pro Lys Leu His Thr Cys
 65 70 75 80
 Glu Lys Cys Ser Thr Ser Ile Ala Asn Gln Ala Val Arg Ile Gln Glu
 85 90 95
 Gly Arg Tyr Arg His Pro Gly Cys Tyr Thr Cys Ala Asp Cys Gly Leu
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<210> 3063
 <211> 386
 <212> DNA
 <213> Homo sapiens

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<210> 3064

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3064

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Pro	Asp	Met	Leu	Asp	Glu	Lys	Asp	Tyr	Leu	Lys	Glu	Val	Leu	Glu	Ile
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Val	Lys	Tyr	Lys	Gly	Asp	Lys	Glu	Pro	Asn	Pro	Ala	Ser	Met	Arg	Val
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Lys	Asp	Ala	Glu	Ala	Thr	Leu	Thr	Trp	Tyr	Gly	Ser	Asp	Arg	Thr	
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<210> 3065

<211> 2104

<212> DNA

<213> Homo sapiens

<400> 3065

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2104

<210> 3066
<211> 183
<212> PRT
<213> Homo sapiens

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35 40 45
Pro Val Gly Glu Glu Ser Ile Ser Asp Ala Glu Lys Val Ala Met Xaa
50 55 60
Ser Gln Gly Pro Xaa Thr Ala Pro Gly Ser Pro Cys Arg Ser Cys Gly
65 70 75 80
Thr Cys Cys Thr Arg Gly Thr Xaa Leu Lys Ser Lys Val Phe Leu Leu
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Gln Glu Glu Leu Ala Tyr Tyr Lys Ser Glu Glu Met Glu Glu Glu Asn
100 105 110
Arg Ile Pro Gln Pro Pro Pro Ile Ala His Pro Arg Thr Ser Pro Gln
115 120 125
Pro Glu Ser Gly Ile Lys Arg Leu Phe Ser Phe Phe Ser Arg Asp Lys
130 135 140
Lys Arg Leu Ala Asn Thr Gln Arg Asn Val His Ile Gln Glu Ser Phe
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<210> 3067
<211> 645
<212> DNA
<213> Homo sapiens

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<210> 3068

<211> 204

<212> PRT

<213> Homo sapiens

<400> 3068

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Ser	Pro	Asn	Arg	Ala	Gln	Gly	Pro	Ser	Xaa	Val	Leu	Val	His	Gln	Ala	35	40	45	
Arg	Glu	Pro	Thr	Ala	Gly	Ser	Pro	Pro	Cys	Ser	Leu	Pro	Arg	Pro	Asp	50	55	60	
Leu	Gln	Pro	Pro	Ser	Thr	Pro	Pro	Pro	Pro	Val	His	Lys	Glu	Gln	Lys	65	70	75	80
Lys	Ser	Asp	Pro	Pro	Pro	Pro	Pro	Pro	Gly	Lys	Phe	Lys	Ser	Phe	Leu	85	90	95	
Pro	Pro	Arg	Ser	Pro	Gly	Asn	Ser	Ala	Leu	Gly	Pro	Arg	Arg	Gly	Trp	100	105	110	
Gly	Trp	Ile	Ala	Ala	Gly	Gly	Ala	Pro	Ala	Met	Pro	Arg	Pro	Pro	Ser	115	120	125	
Gly	Ala	Gly	Asp	Arg	Glu	Ile	Pro	Arg	Asp	Leu	Ala	Cys	Ala	Pro	Tyr	130	135	140	
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Arg	Arg	Cys	Gly	Ser	Lys	Glu	Pro	Glu	Ala	Ala	Ala	Ser	Arg	Pro	Pro	165	170	175	
Ser	Pro	Ala	Glu	Glu	Glu	Pro	Pro	Pro	Val	Ser	Ala	Glu	Glu	Thr	Pro	180	185	190	
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<211> 1561

<212> DNA

<213> Homo sapiens

<400> 3069

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 180

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<210> 3070

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3070

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          20           25           30
Leu Gly Ser Ser Val Leu His Trp Gly Tyr Leu Pro Ser Lys Asp Asp
          35           40           45
Tyr Phe Gln Val Leu Cys Val Ala Asp Val Val Ile Ser Thr Ala Lys
          50           55           60
His Glu Phe Phe Gly Val Ala Met Leu Glu Ala Val Tyr Cys Gly Cys
65           70           75           80
Tyr Pro Leu Cys Pro Lys Asp Leu Val Tyr Pro Glu Ile Phe Pro Ala
          85           90           95
Glu Tyr Leu Tyr Ser Thr Pro Glu Gln Leu Ser Lys Arg Leu Gln Asn
          100          105          110
Phe Cys Lys Arg Pro Asp Ile Ile Arg Lys His Leu Tyr Lys Gly Glu
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<210> 3071

<211> 3343

<212> DNA

<213> Homo sapiens

<400> 3071

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<211> 349

<212> PRT

<213> Homo sapiens

<400> 3072

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			20					25					30		
Lys	Glu	Ser	Arg	Gly	Leu	Arg	Gln	Gln	Gly	Thr	Ser	Val	Ala	Gln	Ser
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			50			55				60					
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Ala	Arg	Leu	Pro	Leu	Pro	Cys	Pro	Glu	Cys	Gly	Arg	Arg	Phe	Arg	His
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<212> DNA
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540

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<210> 3074

<211> 263

<212> PRT

<213> Homo sapiens

<400> 3074

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			20					25					30		
Ser	Cys	Glu	Phe	Leu	Leu	Ala	Gly	Ala	Gly	Gly	Ala	Gly	Ala	Gly	Ala
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Val	Arg	Ile	His	Cys	Asn	Ile	Thr	Glu	Ser	Tyr	Pro	Ala	Val	Pro	Pro
65					70				75					80	
Ile	Trp	Ser	Val	Glu	Ser	Asp	Asp	Pro	Asn	Leu	Ala	Ala	Val	Leu	Glu
			85						90					95	
Arg	Leu	Val	Asp	Ile	Lys	Lys	Gly	Asn	Thr	Leu	Leu	Leu	Gln	His	Leu
		100						105					110		
Lys	Arg	Ile	Ile	Ser	Asp	Leu	Cys	Lys	Leu	Tyr	Asn	Leu	Pro	Gln	His
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Thr	Glu	Asp	Leu	Asp	His	Tyr	Glu	Met	Lys	Glu	Glu	Glu	Pro	Ala	Glu
			165					170					175		
Gly	Lys	Lys	Ser	Glu	Asp	Asp	Gly	Ile	Gly	Lys	Glu	Asn	Leu	Ala	Ile
		180					185						190		
Leu	Glu	Lys	Ile	Lys	Lys	Asn	Gln	Arg	Gln	Asp	Tyr	Leu	Asn	Gly	Ala
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Val	Ser	Gly	Ser	Val	Gln	Ala	Thr	Asp	Arg	Leu	Met	Lys	Glu	Leu	Gln
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Gly	Tyr	Ile	Thr	Xaa	Ser	Gln	Ser	Phe	Lys	Gly	Gly	Asn	Tyr	Xaa	Ser
225					230				235					240	
Ser	Asn	Ser	Trp	Asn	Asp	Ser	Leu	Tyr	Gly	Trp	Asp	Val	Gln	Leu	Leu
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Lys	Val	Asp	Gln	Gly	Ser	Val									
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<210> 3075

<211> 603

<212> DNA

<213> Homo sapiens

<400> 3075

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240
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<210> 3076

<211> 201

<212> PRT

<213> Homo sapiens

<400> 3076

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20          25          30
Val Gly Pro Gln Lys Lys Lys Lys Lys Lys Lys Lys Val Leu Gly Gly
35          40          45
Gly Arg Phe Gly Gln Val His Arg Cys Thr Glu Lys Ser Thr Gly Leu
50          55          60
Ala Leu Ala Ala Lys Ile Ile Lys Val Lys Asn Val Lys Asp Arg Glu
65          70          75          80
Asp Val Lys Asn Glu Val Asn Ile Met Asn Gln Leu Ser His Val Asn
85          90          95
Leu Ile Gln Leu Tyr Asp Ala Phe Glu Ser Lys Ser Ser Phe Thr Leu
100         105         110
Ile Met Glu Tyr Val Asp Gly Gly Glu Leu Phe Asp Arg Ile Thr Asp
115         120         125
Glu Lys Tyr His Leu Thr Glu Leu Asp Val Val Leu Phe Thr Arg Gln
130         135         140
Ile Cys Glu Gly Val His Tyr Leu His Gln His Tyr Ile Leu His Leu
145         150         155         160
Asp Leu Lys Pro Glu Asn Ile Leu Cys Val Ser Gln Thr Gly His Gln

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				165					170					175		
Ile	Lys	Ile	Ile	Asp	Phe	Gly	Leu	Ala	Arg	Arg	Tyr	Lys	Pro	Arg	Glu	
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<210> 3077
<211> 1377
<212> DNA
<213> Homo sapiens
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<400> 3077

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180					
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240					
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300					
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360					
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420					
gcccggggaga	cccgtcgtca	ggagctcctg	gagaagatta	cggagggcca	ggctgctaag
480					
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540					
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600					
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660					
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1140					
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1260					

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<210> 3078
 <211> 310
 <212> PRT
 <213> Homo sapiens

<400> 3078
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 Pro Leu Leu Leu Met Pro Glu Glu Ala Arg Leu Leu Ala Glu Ile Gly
 50 55 60
 Ala Val Thr Leu Val Ser Ala Pro Arg Pro Asp Ser Arg His His Ser
 65 70 75 80
 Leu Ala Leu Thr Ser Phe Lys Arg Gln Gln Glu Glu Ser Phe Gln Glu
 85 90 95
 Gln Ser Ala Leu Ala Ala Glu Ala Arg Glu Thr Arg Arg Gln Glu Leu
 100 105 110
 Leu Glu Lys Ile Thr Glu Gly Gln Ala Ala Lys Lys Gln Lys Leu Glu
 115 120 125
 Gln Ala Ser Gly Ala Ser Ser Ser Gln Glu Ala Gly Ser Ser Gln Ala
 130 135 140
 Ala Lys Glu Asp Glu Thr Ser Asp Gly Gln Ala Ser Gly Glu Gln Glu
 145 150 155 160
 Glu Ala Gly Pro Ser Ser Ser Gln Ala Gly Pro Ser Asn Gly Val Ala
 165 170 175
 Pro Leu Pro Arg Ser Ala Leu Leu Val Gln Leu Ala Thr Ala Arg Pro
 180 185 190
 Arg Pro Val Lys Ala Arg Pro Leu Asp Trp Arg Val Gln Ser Lys Asp
 195 200 205
 Trp Pro His Ala Gly Arg Pro Ala His Glu Leu Arg Tyr Ser Ile Tyr
 210 215 220
 Arg Asp Leu Trp Glu Arg Gly Phe Phe Leu Ser Ala Ala Gly Lys Phe
 225 230 235 240
 Gly Gly Asp Phe Leu Val Tyr Pro Gly Asp Pro Leu Arg Phe His Ala
 245 250 255
 His Tyr Ile Ala Gln Cys Trp Ala Pro Glu Asp Thr Ile Pro Leu Gln
 260 265 270
 Asp Leu Val Ala Ala Gly Arg Leu Gly Thr Ser Val Arg Lys Thr Leu
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<210> 3079
 <211> 1785

<212> DNA

<213> Homo sapiens

<400> 3079

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480
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660
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720
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900
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1020
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<210> 3080
<211> 500
<212> PRT
<213> Homo sapiens
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<400> 3080															
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			20					25					30		
Val	Ser	Gln	Val	Gln	Pro	Pro	Pro	Ser	Lys	Ala	Ser	Ala	Pro	Glu	Pro
		35					40					45			
Pro	Ala	Glu	Glu	Glu	Val	Ala	Thr	Gly	Thr	Thr	Ser	Ala	Ser	Asp	Asp
	50					55					60				
Leu	Glu	Ala	Leu	Gly	Thr	Leu	Ser	Leu	Gly	Thr	Thr	Glu	Glu	Lys	Ala
65					70					75					80
Ala	Ala	Glu	Ala	Ala	Val	Pro	Arg	Thr	Ile	Gly	Ala	Glu	Leu	Met	Glu
				85					90					95	
Leu	Val	Arg	Arg	Asn	Thr	Gly	Leu	Ser	His	Glu	Leu	Cys	Arg	Val	Ala
		100						105					110		
Ile	Gly	Ile	Ile	Val	Gly	His	Ile	Gln	Ala	Ser	Val	Pro	Ala	Ser	Ser
		115					120					125			
Pro	Val	Met	Glu	Gln	Val	Leu	Leu	Ser	Leu	Val	Glu	Gly	Lys	Asp	Leu
	130					135					140				
Ser	Met	Ala	Leu	Pro	Ser	Gly	Gln	Val	Cys	His	Asp	Gln	Gln	Arg	Leu
145					150					155					160
Glu	Val	Ile	Phe	Ala	Asp	Leu	Ala	Arg	Arg	Lys	Asp	Asp	Ala	Gln	Gln
				165					170					175	
Arg	Ser	Trp	Ala	Leu	Tyr	Glu	Asp	Glu	Gly	Val	Ile	Arg	Cys	Tyr	Leu
		180						185					190		
Glu	Glu	Leu	Leu	His	Ile	Leu	Thr	Asp	Ala	Asp	Pro	Glu	Val	Cys	Lys
		195					200					205			
Lys	Met	Cys	Lys	Arg	Asn	Glu	Phe	Glu	Ser	Val	Leu	Ala	Leu	Val	Ala
	210					215					220				
Tyr	Tyr	Gln	Met	Glu	His	Arg	Ala	Ser	Leu	Arg	Leu	Leu	Leu	Leu	Lys
225					230					235					240
Cys	Phe	Gly	Ala	Met	Cys	Ser	Leu	Asp	Ala	Ala	Ile	Ile	Ser	Thr	Leu
				245					250					255	
Val	Ser	Ser	Val	Leu	Pro	Val	Glu	Leu	Ala	Arg	Asp	Met	Gln	Thr	Asp
			260					265					270		
Thr	Gln	Asp	His	Gln	Lys	Leu	Cys	Tyr	Ser	Ala	Leu	Ile	Leu	Ala	Met
		275					280					285			
Val	Phe	Ser	Met	Gly	Glu	Ala	Val	Pro	Tyr	Ala	His	Tyr	Glu	His	Leu

290 295 300
 Gly Thr Pro Phe Ala Gln Phe Leu Leu Asn Ile Val Glu Asp Gly Leu
 305 310 315 320
 Pro Leu Asp Thr Thr Glu Gln Leu Pro Asp Leu Cys Val Asn Leu Leu
 325 330 335
 Leu Ala Leu Asn Leu His Leu Pro Ala Ala Asp Gln Asn Val Ile Met
 340 345 350
 Ala Ala Leu Ser Lys His Ala Asn Val Lys Ile Phe Ser Glu Lys Leu
 355 360 365
 Leu Leu Leu Leu Asn Arg Gly Asp Asp Pro Val Arg Ile Phe Lys His
 370 375 380
 Glu Pro Gln Pro Pro His Ser Val Leu Lys Phe Leu Gln Asp Val Phe
 385 390 395 400
 Gly Ser Pro Ala Thr Ala Ala Ile Phe Tyr His Thr Asp Met Met Ala
 405 410 415
 Leu Ile Asp Ile Thr Val Arg His Ile Ala Asp Leu Ser Pro Gly Asp
 420 425 430
 Lys Gly Pro Phe Gly Ala Gly Gln Arg Pro Trp Pro Gly Val Pro Arg
 435 440 445
 Leu Leu Glu Pro Gly Ser Thr Pro Ser Arg Glu Pro His Pro Val Glu
 450 455 460
 Arg Ser Gly Val Pro Ala Leu Thr Ser Ser Trp Ala Ser Gly Cys Pro
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 Arg Pro Leu His Pro Ala Leu Gln Leu Val Ile Asp Ser Ala Phe Gly
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 Gly Arg Ser Val
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<210> 3081

<211> 1902

<212> DNA

<213> Homo sapiens

<400> 3081

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 420
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 480
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 540
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 600

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 660
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 1020
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 1902

<210> 3082

<211> 414

<212> PRT

<213> Homo sapiens

<400> 3082

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<210> 3083
<211> 610
<212> DNA
<213> Homo sapiens
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<400> 3083

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 120
 gactgggcag gccgggcccg ggcactgggt ggtgacagtc atacttcgtg gagcccagcg
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<210> 3084

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3084

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Leu	Ser	Trp	His	Arg	Gly	Pro	Pro	Cys	Glu	Val	Tyr	Ile	Ala	Val	Leu
			20					25					30		
Gln	Arg	Ser	Arg	Leu	His	Ala	Ala	Asp	Trp	Ala	Gly	Arg	Ala	Arg	Ala
		35					40					45			
Leu	Val	Gly	Asp	Ser	His	Thr	Ser	Trp	Ser	Pro	Ala	Ser	Ile	Pro	Gly
	50					55					60				
Lys	His	Tyr	Gln	Ala	Val	Gly	Leu	His	Leu	Trp	Lys	Val	Glu	Lys	Arg
65				70					75					80	
Arg	Val	Asn	Leu	Pro	Arg	Val	Leu	Ser	Met	Pro	Pro	Val	Ala	Gly	Thr
			85					90					95		
Ala	Cys	His	Ala	Tyr	Asp	Arg	Glu	Val	His	Leu	Arg	Cys	Glu	Leu	Ser
			100					105					110		
Pro	Gly	Tyr	Tyr	Leu	Ala	Val	Pro	Ser	Thr	Phe	Leu	Lys	Asp	Ala	Pro
		115					120					125			
Gly	Glu	Phe	Leu	Leu	Arg	Val	Phe	Ser	Thr	Gly	Arg	Val	Ser	Leu	Arg
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<210> 3085

<211> 1080

<212> DNA

<213> Homo sapiens

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 caaaagataa gaaaatggaa attaagggaa atctgttcag caacaaagat cttgaggaat
 180
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 360
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 420
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 720
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<210> 3086

<211> 58

<212> PRT

<213> Homo sapiens

<400> 3086

Met	Cys	Val	Thr	Gln	Cys	Ser	Ser	Arg	Ser	Gly	Leu	Gly	Ser	Tyr	Phe
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Ala	Tyr	Met	Xaa	Asn	Val	Leu	Ser	Arg	Ala	Arg	Trp	Leu	Thr	Pro	Val
			20					25						30	
Thr	Pro	Ala	Leu	Trp	Glu	Ala	Glu	Ala	Gly	Gly	Ser	Arg	Gly	Gln	Glu
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<210> 3087

<211> 2329

<212> DNA

<213> Homo sapiens

<400> 3087

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<210> 3088

<211> 280

<212> PRT

<213> Homo sapiens

<400> 3088

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			20					25						30	
Asp	Asp	Phe	Asp	Pro	Gly	Lys	Lys	Val	Glu	Val	Glu	Pro	Pro	Pro	Asp
		35					40					45			
Arg	Pro	Val	Arg	Ala	Cys	Arg	Thr	Gln	Gln	Pro	Glu	Met	Glu	Arg	Thr
	50					55					60				
His	Ile	Gln	Gln	Leu	Leu	Glu	His	Phe	Leu	Arg	Gln	Leu	Gln	Arg	Lys
65				70						75				80	
Asp	Pro	His	Gly	Phe	Phe	Ala	Phe	Pro	Val	Thr	Asp	Ala	Ile	Ala	Pro
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Gly	Tyr	Ser	Met	Ile	Ile	Lys	His	Pro	Met	Asp	Phe	Gly	Thr	Met	Lys
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Asp	Lys	Ile	Val	Ala	Asn	Glu	Tyr	Lys	Ser	Val	Thr	Glu	Phe	Lys	Ala
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Asp	Phe	Lys	Leu	Met	Cys	Asp	Asn	Ala	Met	Thr	Tyr	Asn	Arg	Pro	Asp

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Thr Val Tyr Tyr Lys Leu	Ala Lys Lys Ile Leu	His Ala Gly Phe Lys	
145	150	155	160
Met Met Ser Lys Gln Ala	Ala Leu Leu Gly Asn Glu	Asp Thr Ala Val	
	165	170	175
Glu Glu Pro Val Pro Glu	Val Val Pro Val Gln	Val Glu Thr Ala Lys	
	180	185	190
Lys Ser Lys Lys Pro Ser	Arg Glu Val Ile Ser Cys	Met Phe Glu Pro	
	195	200	205
Glu Gly Asn Ala Cys Ser	Leu Thr Asp Ser Thr	Ala Glu Glu His Val	
	210	215	220
Leu Ala Leu Val Glu His	Ala Ala Asp Glu Ala	Arg Asp Arg Ile Asn	
225	230	235	240
Arg Phe Leu Pro Gly Gly	Lys Met Gly Tyr Leu	Lys Arg Asn Gly Asp	
	245	250	255
Gly Ser Leu Leu Tyr Ser	Val Val Asn Thr Ala	Glu Pro Asn Ala Asp	
	260	265	270
Glu Glu Glu Thr His Pro	Val Thr		
	275	280	

<210> 3089
 <211> 722
 <212> DNA
 <213> Homo sapiens

<400> 3089
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 300
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 420
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 720
 ca
 722

<210> 3090

<211> 240
 <212> PRT
 <213> Homo sapiens

<400> 3090
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 35 40 45
 Gly Leu Ser Ser Pro Glu Phe Ser Glu Leu Cys Ile Trp Leu Gly Ser
 50 55 60
 Gln Ile Lys Ser Leu Cys Asn Leu Glu Glu Ser Ile Thr Ser Ala Gly
 65 70 75 80
 Arg Asp Asp Leu Glu Ser Phe Gln Leu Glu Ile Ser Gly Phe Leu Lys
 85 90 95
 Glu Met Ala Cys Pro Tyr Ser Val Leu Val Ser Gly Asp Ile Lys Glu
 100 105 110
 Arg Leu Thr Lys Lys Asp Asp Cys Leu Lys Leu Leu Leu Phe Leu Ser
 115 120 125
 Thr Glu Leu Gln Ala Leu Gln Ile Leu Gln Asn Lys Lys His Lys Asn
 130 135 140
 Ser Gln Leu Asp Lys Asn Ser Glu Val Tyr Gln Glu Val Gln Ala Met
 145 150 155 160
 Phe Asp Thr Leu Gly Ile Pro Lys Ser Thr Thr Ser Asp Ile Pro His
 165 170 175
 Met Leu Asn Gln Val Glu Ser Lys Val Lys Asp Ile Leu Ser Lys Val
 180 185 190
 Gln Lys Asn His Val Gly Lys Pro Leu Leu Lys Met Asp Leu Asn Ser
 195 200 205
 Glu Gln Ala Glu Gln Leu Glu Arg Ile Asn Asp Ala Leu Ser Cys Glu
 210 215 220
 Tyr Glu Cys Arg Arg Arg Met Leu Met Lys Arg Leu Asp Val Thr Val
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<210> 3091
 <211> 333
 <212> DNA
 <213> Homo sapiens

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<210> 3092
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 3092
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 35 40 45
 Ala Phe Ser Asn His Phe Gly Thr Leu Gly Arg Arg Gly Arg Pro Gly
 50 55 60
 Gly Thr Lys Gly Leu Gly Cys Ser Leu Ser Val Pro Asp Pro Cys Gln
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 Ala Lys Met Val Trp Gln Arg Gly Glu Gln Leu Leu Pro Arg Ala Ser
 85 90 95
 Phe Pro Ser Ala Pro Phe Thr Arg
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<210> 3093
 <211> 720
 <212> DNA
 <213> Homo sapiens

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<210> 3094

<211> 179
 <212> PRT
 <213> Homo sapiens

<400> 3094

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Leu Asp Ile Ser Gln Leu Gln Pro Pro Leu Pro Asp Gln Val Val Ile
      35           40           45
Lys Thr Gln Thr Glu Tyr Gln Leu Ser Ser Pro Asp Gln Gln Asn Phe
      50           55           60
Pro Asp Leu Glu Gly Gln Arg Leu Asn Cys Ser His Pro Glu Glu Gly
65           70           75           80
Arg Arg Leu Pro Thr Ala Arg Met Ile Ala Phe Ala Met Ala Leu Leu
      85           90           95
Gly Cys Val Leu Ile Met Tyr Lys Ala Ile Trp Tyr Asp Gln Phe Thr
      100          105          110
Cys Pro Asp Gly Phe Leu Leu Arg His Lys Ile Cys Thr Pro Leu Thr
      115          120          125
Leu Glu Met Tyr Tyr Thr Glu Met Asp Pro Glu Arg His Arg Ser Ile
      130          135          140
Leu Ala Ala Ile Gly Ala Tyr Pro Leu Ser Arg Lys His Gly Thr Glu
145          150          155          160
Thr Pro Ala Ala Trp Gly Asp Gly Tyr Arg Ala Ala Lys Glu Glu Arg
      165          170          175

Lys Gly Pro

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<210> 3095
 <211> 519
 <212> DNA
 <213> Homo sapiens

<400> 3095

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<210> 3096
 <211> 159
 <212> PRT
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<400> 3096
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 35 40 45
 Ser Leu Ala Arg Arg Pro Asp Arg Arg Glu Arg Met Leu Ala Ser Leu
 50 55 60
 Trp Glu Met Glu Ile Ser Gly Arg Val Val Asp Ala Val Asp Gly Trp
 65 70 75 80
 Met Leu Asn Ser Ser Ala Ile Arg Asn Leu Gly Val Asp Leu Leu Pro
 85 90 95
 Gly Tyr Gln Asp Pro Tyr Ser Gly Arg Thr Leu Thr Lys Gly Glu Val
 100 105 110
 Gly Cys Phe Leu Ser His Tyr Ser Ile Trp Glu Glu Arg Ala Val Gln
 115 120 125
 Gly Thr Leu Leu Ala Thr Gly Pro Gly Gly Leu Leu Arg Pro Ala Pro
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 Ala Arg Cys Pro Tyr Pro Leu Cys Arg Gly Arg Arg Val Ala Gln
 145 150 155

<210> 3097
 <211> 4953
 <212> DNA
 <213> Homo sapiens

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<211> 1359

<212> PRT

<213> Homo sapiens

<400> 3098

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Tyr Glu Thr Leu Glu Lys Asn Glu Val Val Pro Glu Glu Asn Trp His		1245
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Gly Ala Arg Asp His Leu Leu His His Trp Ile Ala Leu Leu Ala Asp		1295
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Cys Pro Ile Thr Ala His Met Tyr Glu Asp Val Ala Leu Ile Lys Asp		1310
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His Thr Leu Val Asn Ser Leu Ile Arg Val Leu Gln Thr Leu Gln Glu		1325
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 Gly Lys Ile Met Cys Lys Ile Thr Ser Ala Leu Tyr Thr Leu Asn Phe

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Ile Ile Cys Phe Cys Val Trp Met Ala Ala Ile Leu Leu Ser Ile Pro
      100      105      110
Gln Leu Val Phe Tyr Thr Val Asn Asp Asn Ala Arg Cys Ile Pro Ile
      115      120      125
Phe Pro Arg Tyr Leu Gly Thr Ser Met Lys Ala Leu Ile His Met Leu
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<211> 2623

<212> DNA

<213> Homo sapiens

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 <212> PRT
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 Lys Lys Tyr Tyr Phe Pro Val Arg Glu Leu Glu Arg Ser Leu Arg Phe
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 Gly Gly Thr Thr Phe Gly Arg His Leu Val Gln Asn Val Arg Leu Glu
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 Val Pro Cys Asp Cys Arg Pro Gly Gln Lys Lys Cys Thr Cys Tyr Arg
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 Pro Asn Arg Arg Glu Thr Trp Leu Phe Ser Arg Phe Ser Thr Gly Trp
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<211> 1228

<212> DNA

<213> Homo sapiens

<400> 3103

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2325

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Arg Lys Gly Arg Val Val Ser Arg Pro Asp Gly Thr Val Ala Phe Glu		
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<212> PRT

<213> Homo sapiens

<400> 3108

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<212> DNA
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<211> 207

<212> PRT

<213> Homo sapiens

<400> 3110

Met	Tyr	Lys	Arg	Gly	Leu	Val	Gln	Val	Trp	Ser	Leu	Glu	Gln	Pro	Glu
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Trp	His	Cys	Lys	Ile	Asp	Glu	Gly	Ser	Ala	Gly	Leu	Val	Ala	Ser	Cys
			20					25					30		
Trp	Ser	Pro	Asp	Gly	Arg	His	Ile	Leu	Asn	Thr	Thr	Glu	Phe	His	Leu
		35					40					45			
Arg	Ile	Thr	Val	Trp	Ser	Leu	Cys	Thr	Lys	Ser	Val	Ser	Tyr	Ile	Lys
	50					55					60				
Tyr	Pro	Lys	Ala	Cys	Leu	Gln	Gly	Ile	Thr	Phe	Thr	Arg	Asp	Gly	Arg
65					70				75					80	
Tyr	Met	Ala	Leu	Ala	Glu	Arg	Arg	Asp	Cys	Lys	Asp	Tyr	Val	Ser	Ile
			85					90						95	
Phe	Val	Cys	Ser	Asp	Trp	Gln	Leu	Leu	Arg	His	Phe	Asp	Thr	Asp	Thr
			100					105					110		
Gln	Asp	Leu	Thr	Gly	Ile	Glu	Trp	Ala	Pro	Asn	Gly	Cys	Val	Leu	Ala
		115					120					125			
Val	Trp	Asp	Thr	Cys	Leu	Glu	Tyr	Lys	Ile	Leu	Leu	Tyr	Ser	Leu	Asp
	130					135					140				
Gly	Arg	Leu	Leu	Ser	Thr	Tyr	Ser	Ala	Xaa	Arg	Val	Val	Xaa	Leu	Gly

145		150		155		160
Ile	Lys	Ser	Val	Ala	Trp	Gly
		165		170		175
Ser	Tyr	Asp	Gly	Lys	Val	Arg
		180		185		190
Ile	Thr	Glu	Phe	Gly	His	Pro
		195		200		205

<210> 3111
 <211> 1269
 <212> DNA
 <213> Homo sapiens

<400> 3111
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 120
 aactacagaa tgcacgggtt cagaaagcta ttttaagtta ttacaaata aagtatctaa
 180
 aactcaaaaa caggctctgt atgctatatc tagtttatcc cttcccgaac aaaatttctg
 240
 ttatttgggc aaattcttaa accatgggtt aaaccgtaat gggtacaaac cacaaacaca
 300
 tccatccaga gactgaaacc gtttctatcc ggtcagtggc aaaactgttg aaagggcaat
 360
 agttgaagct gttgggtttt atatagtgtg aactctgata aatattccta ccaggactaa
 420
 aacacagcac gctttgcggg catggctgac tcacaaaggt tgtaacaaac aagaactact
 480
 cttcactcga caccatggct cagaggccac cgagaagcac gagtgactga cagctcctct
 540
 gcttacaaac gaatgaaacc caaagtggat gtcgttctca cagcactgaa agtgcttcag
 600
 gactcacact gatccaatac taactttctt cctatttta cacatatttt tctactgtcc
 660
 agtggaaatc attttctgtt ttggctaaac aacaaatact agtttataac aggaatggta
 720
 aaatctgtga gaattctgct caatttaata caagatcact actttcttta gaatggtttc
 780
 tgcgtgtttc tacgtcacc cctgtatttt tagcttccag ttctctggta aggaataagt
 840
 tctccttccc agtcacactc ggggtcattt acacgtttct gggatgccct tgctcgtcca
 900
 tggagggcag gtgcgtgcag tgactcactc tgctcttccc ctcttctcag gaccagtccc
 960
 cgaaccttct gccttgcaga tcctcccgtc tccgccacac tctcgcgtc ggaagcgagc
 1020
 tcctggatca tacagctgca aggctggccg gtccttgttt gccagtcgct cttttctggg
 1080
 tgctggactg tcgtcacacc tctgcgtctc tcccagtctc tccatggcct cccccggagc
 1140
 cccgctgtcc tggctcccct tcttccctct gtcttggcca ggtcctttcc cccatctctg
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<210> 3112
<211> 151
<212> PRT
<213> Homo sapiens

<400> 3112
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20 25 30
Glu Gly Arg Arg Gly Ala Arg Thr Ala Gly Leu Arg Gly Arg Pro Trp
35 40 45
Arg Asp Trp Glu Glu Arg Arg Gly Val Thr Thr Val Gln His Pro Glu
50 55 60
Lys Ser Asp Trp Gln Thr Arg Thr Gly Gln Pro Cys Ser Cys Met Ile
65 70 75 80
Gln Glu Leu Ala Ser Glu Arg Glu Ser Val Ala Glu Ala Gly Gly Ser
85 90 95
Ala Arg Gln Lys Val Arg Gly Leu Val Leu Arg Arg Gly Lys Arg Gln
100 105 110
Ser Glu Ser Leu His Ala Pro Gly Leu His Gly Arg Ala Arg Ala Ser
115 120 125
Gln Lys Arg Val Asn Asp Pro Glu Cys Asp Trp Glu Gly Glu Leu Ile
130 135 140
Pro Tyr Gln Glu Thr Gly Ser
145 150

<210> 3113
<211> 631
<212> DNA
<213> Homo sapiens

<400> 3113
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120
ccaaaaggga aggagatagt aagcctgctg gaaagaaaca tcaccgtgac aatgtacatc
180
accatcggaa cccggaactt gcagaaatat gtgagccgca cttcggttgt gtttgtctcc
240
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300
aggttttcgat atgcaaattgc cagggatagg aaccagcgcc gactggggga tgcagcaaag
360
aaagccatca gcaaactcca gatcaggacc atcaagaagg gtgacaagga aacagagtct
420
gattttgaca actgtgcagt ttgtattgaa gggtacaagc ccaatgacgt tgtccggatc
480

ctgccctgcc ggcattcttt ccacaagtcc tgtgttgacc cctggcttct agaccatcgt
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<210> 3114
 <211> 210
 <212> PRT
 <213> Homo sapiens

<400> 3114
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 20 25 30
 Ile Val Ala Ile Met Ile Pro Glu Pro Lys Gly Lys Glu Ile Val Ser
 35 40 45
 Leu Leu Glu Arg Asn Ile Thr Val Thr Met Tyr Ile Thr Ile Gly Thr
 50 55 60
 Arg Asn Leu Gln Lys Tyr Val Ser Arg Thr Ser Val Val Phe Val Ser
 65 70 75 80
 Ile Ser Phe Ile Val Leu Met Ile Ile Ser Leu Ala Trp Leu Val Phe
 85 90 95
 Tyr Tyr Ile Gln Arg Phe Arg Tyr Ala Asn Ala Arg Asp Arg Asn Gln
 100 105 110
 Arg Arg Leu Gly Asp Ala Ala Lys Lys Ala Ile Ser Lys Leu Gln Ile
 115 120 125
 Arg Thr Ile Lys Lys Gly Asp Lys Glu Thr Glu Ser Asp Phe Asp Asn
 130 135 140
 Cys Ala Val Cys Ile Glu Gly Tyr Lys Pro Asn Asp Val Val Arg Ile
 145 150 155 160
 Leu Pro Cys Arg His Leu Phe His Lys Ser Cys Val Asp Pro Trp Leu
 165 170 175
 Leu Asp His Arg Thr Cys Pro Met Cys Lys Met Asn Ile Leu Lys Ala
 180 185 190
 Leu Gly Ile Pro Pro Asn Ala Asp Cys Met Asp Asp Phe Ala Thr Asp
 195 200 205
 Phe Glu
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<210> 3115
 <211> 1366
 <212> DNA
 <213> Homo sapiens

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 120
 gcagaaaaga tggaaaaaag gacatgtgca ctctgcccc aagatgtcga atataatgtc
 180

ctatactttg cacaatcaga gaatatagct gctcatgaga attgtttgct gtattcttca
 240
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 300
 tcagtaaaga aagaaatcca gagaggaagg aagttgaaat gcaaattttg tcataaaaga
 360
 ggagccaccg tgggatgtga tttaaaaaac tgtaacaaga attaccactt tttctgtgcc
 420
 aagaaggacg acgcagttcc acagtctgat ggagttcgag gaatttataa actgctttgc
 480
 cagcaacatg ctcaattccc gatcatcgct caaagtggta aattttcagg agtgaaaaga
 540
 aaaagaggaa ggaagaaacc cctctcaggc aatcatgtac agccacccga aacaatgaaa
 600
 tgtaatacat tcataagaca agtgaaagaa gagcatggca gacacacaga tgcaactgtg
 660
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 720
 aatattagac aaagttcatt caattccaga aaaactcatg gatgagacta cttcagaatc
 780
 agactatgaa gaaatcggga gtgcactttt tgactgtaga ttgttcgaag acacatttgt
 840
 aaattttcaa gcagcaatag agaaaaaat tcatgcatct caacaaaggt ggcagcagtt
 900
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 960
 tagagatctt atgtcaagtt ctacatcaat atcatccctg tcttattagg gattaccgtt
 1020
 tcctaagcca agagtcatgt caaattgcaa tcaggctcaa aaccagagac caggctgtga
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 aatccacaca tctttagaac tagtcgtctc ctcttggcct cagcagctct tccctgttct
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 ctttgattct acttacagcc catgatagcc tcttcttaga tataataaat ttggattata
 1320
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 1366

<210> 3116

<211> 191

<212> PRT

<213> Homo sapiens

<400> 3116

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Val	Leu	Tyr	Phe	Ala	Gln	Ser	Glu	Asn	Ile	Ala	Ala	His	Glu	Asn	Cys
			20					25				30			
Leu	Leu	Tyr	Ser	Ser	Gly	Leu	Val	Glu	Cys	Glu	Asp	Gln	Asp	Pro	Leu
		35				40				45					
Asn	Pro	Asp	Arg	Ser	Phe	Asp	Val	Glu	Ser	Val	Lys	Lys	Glu	Ile	Gln

50	55	60
Arg Gly Arg Lys Leu Lys Cys Lys Phe Cys His Lys Arg Gly Ala Thr		
65	70	75
Val Gly Cys Asp Leu Lys Asn Cys Asn Lys Asn Tyr His Phe Phe Cys		80
	85	90
Ala Lys Lys Asp Asp Ala Val Pro Gln Ser Asp Gly Val Arg Gly Ile		95
	100	105
Tyr Lys Leu Leu Cys Gln Gln His Ala Gln Phe Pro Ile Ile Ala Gln		110
	115	120
Ser Gly Lys Phe Ser Gly Val Lys Arg Lys Arg Gly Arg Lys Lys Pro		125
	130	135
Leu Ser Gly Asn His Val Gln Pro Pro Glu Thr Met Lys Cys Asn Thr		140
145	150	155
Phe Ile Arg Gln Val Lys Glu Glu His Gly Arg His Thr Asp Ala Thr		160
	165	170
Val Lys Val Pro Phe Leu Lys Lys Cys Lys Xaa Ser Arg Thr Ser		175
	180	185
		190

<210> 3117

<211> 1373

<212> DNA

<213> Homo sapiens

<400> 3117

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180
ggcagctcca tctcctgtca accacctgcc gaaatccccg gctacctgcc agccgacacc
240
gtgcacctgg ccgtggaatt cttcaacctg accacctgc cagccaacct cctccagggc
300
gcctctaagc tccaagaatt gcacctctcc agcaatgggc tggaaagcct ctcgcccga
360
ttcctgcggc cagtgcgcga gctgaggggt ctggatctaa cccgaaacgc cctgaccggg
420
ctgcccccg gctcttcca ggcctcagcc accctggaca ccctggtatt gaaagaaaac
480
cagctggagg tcctggaggt ctcgtggcta cacggcctga aagctctggg gcatctggac
540
ctgtctggga accgcctccg gaaactgccc cccgggctgc tggccaactt caccctcctg
600
cgcacccttg accttgggga gaaccagttg gagaccttgc cacctgacct cctgaggggt
660
ccgctgcaat tagaacggct acatctagaa ggcaacaaat tgcaagtact gggaaaagat
720
ctcctcttgc cgcagccgga cctgcgctac ctcttcctga gcggcaacaa gctggccagg
780
gtggcagccg gtgccttcca gggcctgcgg cagctggaca tgetggacct ctccaataac
840
tcaactggcca gcgtgcccga ggggctctgg gcatccctag ggcagccaaa ctgggacatg
900

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 1020
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 1260
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 1373

<210> 3118
 <211> 312
 <212> PRT
 <213> Homo sapiens

<400> 3118
 Val Thr Leu Ser Pro Lys Asp Cys Gln Val Phe Arg Ser Asp His Gly
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 Ser Ser Ile Ser Cys Gln Pro Pro Ala Glu Ile Pro Gly Tyr Leu Pro
 20 25 30
 Ala Asp Thr Val His Leu Ala Val Glu Phe Phe Asn Leu Thr His Leu
 35 40 45
 Pro Ala Asn Leu Leu Gln Gly Ala Ser Lys Leu Gln Glu Leu His Leu
 50 55 60
 Ser Ser Asn Gly Leu Glu Ser Leu Ser Pro Glu Phe Leu Arg Pro Val
 65 70 75 80
 Pro Gln Leu Arg Val Leu Asp Leu Thr Arg Asn Ala Leu Thr Gly Leu
 85 90 95
 Pro Pro Gly Leu Phe Gln Ala Ser Ala Thr Leu Asp Thr Leu Val Leu
 100 105 110
 Lys Glu Asn Gln Leu Glu Val Leu Glu Val Ser Trp Leu His Gly Leu
 115 120 125
 Lys Ala Leu Gly His Leu Asp Leu Ser Gly Asn Arg Leu Arg Lys Leu
 130 135 140
 Pro Pro Gly Leu Leu Ala Asn Phe Thr Leu Leu Arg Thr Leu Asp Leu
 145 150 155 160
 Gly Glu Asn Gln Leu Glu Thr Leu Pro Pro Asp Leu Leu Arg Gly Pro
 165 170 175
 Leu Gln Leu Glu Arg Leu His Leu Glu Gly Asn Lys Leu Gln Val Leu
 180 185 190
 Gly Lys Asp Leu Leu Leu Pro Gln Pro Asp Leu Arg Tyr Leu Phe Leu
 195 200 205
 Ser Gly Asn Lys Leu Ala Arg Val Ala Ala Gly Ala Phe Gln Gly Leu
 210 215 220
 Arg Gln Leu Asp Met Leu Asp Leu Ser Asn Asn Ser Leu Ala Ser Val
 225 230 235 240
 Pro Glu Gly Leu Trp Ala Ser Leu Gly Gln Pro Asn Trp Asp Met Arg

```

<400> 3120
Val His Met Val Leu Asn Gln Gln Gly Arg Pro Ser Gly Asp Ala Phe
 1          5          10          15
Ile Gln Met Thr Ser Ala Glu Arg Ala Leu Ala Ala Ala Gln Arg Cys
          20          25          30
His Lys Lys Val Met Lys Glu Arg Tyr Val Glu Val Val Pro Cys Ser
          35          40          45
Thr Glu Glu Met Ser Arg Val Leu Met Gly Gly Thr Leu Gly Arg Ser
          50          55          60
Gly Met Ser Pro Pro Pro Cys Lys Leu Pro Cys Leu Ser Pro Pro Thr
65          70          75          80
Tyr Thr Thr Phe Gln Ala Thr Pro Thr Leu Ile Pro Thr Glu Thr Ala
          85          90          95
Ala Leu Tyr Pro Ser Ser Ala Leu Leu Pro Ala Ala Arg Val Pro Ala
          100          105          110
Ala Pro Thr Pro Val Ala Tyr Tyr Pro Gly Pro Ala Thr Gln Leu Tyr

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115 120 125
 Leu Asn Tyr Thr Ala Tyr Tyr Pro Ser Pro Glu Asp Asn Ala
 130 135 140

<210> 3121
 <211> 284
 <212> DNA
 <213> Homo sapiens

<400> 3121
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 atctgaggat ttctcaactt ctgcagcaac ttctgcagcc agctcacacg tgaggagaaa
 120
 taagaggaac atgaacctgg acggggcagc ttccattgtc cctctcctgc tcttgctaat
 180
 gaacaaggcc tccccagagt atgaagagaa catgcacaga taccagaagg cagccaagct
 240
 cttccgggga agattctctt tattctgggtg gacagtggta tgaa
 284

<210> 3122
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 3122
 Met Ala Ala Gly Thr Ser Val Ser His Val Gly Ser Trp Ala Ala Pro
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 Gly Pro Ser Glu Asp Phe Ser Thr Ser Ala Ala Thr Ser Ala Ala Ser
 20 25 30
 Ser His Val Arg Arg Asn Lys Arg Asn Met Asn Leu Asp Gly Ala Ala
 35 40 45
 Ser Ile Val Pro Leu Leu Leu Leu Leu Met Asn Lys Ala Ser Pro Glu
 50 55 60
 Tyr Glu Glu Asn Met His Arg Tyr Gln Lys Ala Ala Lys Leu Phe Arg
 65 70 75 80
 Gly Arg Phe Ser Leu Phe Trp Trp Thr Val Val
 85 90

<210> 3123
 <211> 344
 <212> DNA
 <213> Homo sapiens

<400> 3123
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 120
 gcagcccagg tgaccttcag aaagacattg gagaaggaag caaagggaga ggagcccagc
 180
 atcgcagtcc ccaagttcaa acagaggaag ggggagtcctg acggggccta tatccaccgc
 240

atgcagcaag aggcccagca tgtgctgttc ctcagcaaga accaggccat ccggcagcca
300

gaggtgcagg cagctcccaa ggagaagtct gagcagaaaa aagc
344

<210> 3124

<211> 92

<212> PRT

<213> Homo sapiens

<400> 3124

Met	Arg	Ser	Arg	Gln	Glu	Met	Lys	Asn	Pro	Ile	Ser	Asn	Lys	Lys	Arg
1				5					10					15	
Lys	Lys	Ala	Ala	Gln	Val	Thr	Phe	Arg	Lys	Thr	Leu	Glu	Lys	Glu	Ala
		20						25					30		
Lys	Gly	Glu	Glu	Pro	Asp	Ile	Ala	Val	Pro	Lys	Phe	Lys	Gln	Arg	Lys
		35					40					45			
Gly	Glu	Ser	Asp	Gly	Ala	Tyr	Ile	His	Arg	Met	Gln	Gln	Glu	Ala	Gln
	50					55				60					
His	Val	Leu	Phe	Leu	Ser	Lys	Asn	Gln	Ala	Ile	Arg	Gln	Pro	Glu	Val
65					70					75				80	
Gln	Ala	Ala	Pro	Lys	Glu	Lys	Ser	Glu	Gln	Lys	Lys				
				85						90					

<210> 3125

<211> 647

<212> DNA

<213> Homo sapiens

<400> 3125

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ggtcagcagg cagtttagtt gtgggagtat ttccaatttg catgaatgaa acatggacaa
180
ataagataag gctggctcca gggaagtaat tccccagtt cccctgagcc ttggatctgg
240
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300
atgtggcctc ggcccacgcc agaagccggg caaggtecca agtgccggct cgcccacaag
360
ctatggctaa gacagaaaaa caaaggaaaa aaagtcctcc ccaaacacac acataagcaa
420
aaccatctt cctgtgttct ctgccaagag agctggagca aaagagatga gtttgagact
480
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540
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647

<210> 3126

<211> 116
 <212> PRT
 <213> Homo sapiens

<400> 3126

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                20               25               30
His Arg Leu Ser Leu Phe Val Leu Met Asp Glu Ser Glu Ser Gln Thr
              35               40               45
His Leu Phe Cys Ser Ser Ser Leu Gly Arg Glu His Arg Lys Met Gly
              50               55               60
Phe Ala Tyr Val Cys Val Trp Gly Gly Leu Phe Phe Leu Cys Phe Ser
65               70               75               80
Val Leu Ala Ile Ala Cys Gly Arg Ala Gly Thr Trp Asp Leu Ala Arg
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Leu Leu Ala Trp Ala Glu Ala Thr Trp Gly Val Leu Pro Ser Thr Phe
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Cys Asp Val Pro
              115
  
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<210> 3127
 <211> 2218
 <212> DNA
 <213> Homo sapiens

<400> 3127

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120
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180
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240
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420
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480
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540
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600
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660
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720
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780
  
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960
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gcgctgcaga tctcggggg cttgggctac acaagggact atccgtacga gcgcatactg
1080
cgtgacaccc gcacccctct catcttcgag ggaaccaatg agattctccg gatgtacatc
1140
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1200
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1260
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<210> 3128

<211> 565

<212> PRT

<213> Homo sapiens

<400> 3128

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 Gly Leu Phe Gly Leu Gln Val Pro Glu Glu Tyr Gly Gly Leu Gly Phe
 50 55 60
 Ser Asn Thr Met Tyr Ser Arg Leu Gly Glu Ile Ile Ser Met Asp Gly
 65 70 75 80
 Ser Ile Thr Val Thr Leu Ala Ala His Gln Ala Ile Gly Leu Lys Gly
 85 90 95
 Ile Ile Leu Ala Gly Thr Glu Glu Gln Lys Ala Lys Tyr Leu Pro Lys
 100 105 110
 Leu Ala Ser Gly Glu His Ile Ala Ala Phe Cys Leu Thr Glu Pro Ala
 115 120 125
 Ser Gly Ser Asp Ala Ala Ser Ile Arg Ser Arg Ala Thr Leu Ser Glu
 130 135 140
 Asp Lys Lys His Tyr Ile Leu Asn Gly Ser Lys Val Trp Ile Thr Asn
 145 150 155 160
 Gly Gly Leu Ala Asn Ile Phe Thr Val Phe Ala Lys Thr Glu Val Val
 165 170 175
 Asp Ser Asp Gly Ser Val Lys Asp Lys Ile Thr Ala Phe Ile Val Glu
 180 185 190
 Arg Asp Phe Gly Gly Val Thr Asn Gly Lys Pro Glu Asp Lys Leu Gly
 195 200 205
 Ile Arg Gly Ser Asn Thr Cys Glu Val His Phe Glu Asn Thr Lys Ile
 210 215 220
 Pro Val Glu Asn Ile Leu Gly Glu Val Gly Asp Gly Phe Lys Val Ala
 225 230 235 240
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 245 250 255
 Gly Leu Leu Lys Arg Leu Ile Glu Met Thr Ala Glu Tyr Ala Cys Thr
 260 265 270
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 Lys Phe Ala Leu Met Ala Gln Lys Ala Tyr Val Met Glu Ser Met Thr
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 Tyr Leu Thr Ala Gly Met Leu Asp Gln Pro Gly Phe Pro Asp Cys Ser
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		435						440					445				
Thr	Tyr	Cys	Phe	Gly	Arg	Thr	Val	Glu	Thr	Leu	Leu	Leu	Arg	Phe	Gly		
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Lys	Thr	Ile	Met	Glu	Glu	Gln	Leu	Val	Leu	Lys	Arg	Val	Ala	Asn	Ile		
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Leu	Ile	Asn	Leu	Tyr	Gly	Met	Thr	Ala	Val	Leu	Ser	Arg	Ala	Ser	Arg		
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		500						505					510				
Asn	Thr	Phe	Cys	Val	Glu	Ala	Tyr	Leu	Gln	Asn	Leu	Phe	Ser	Leu	Ser		
	515						520				525						
Gln	Leu	Asp	Lys	Tyr	Ala	Pro	Glu	Asn	Leu	Asp	Glu	Gln	Ile	Lys	Lys		
	530				535					540							
Val	Ser	Gln	Gln	Ile	Leu	Glu	Lys	Arg	Ala	Tyr	Ile	Cys	Ala	His	Pro		
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<210> 3129
 <211> 1964
 <212> DNA
 <213> Homo sapiens

<400> 3129
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 1964

<210> 3130

<211> 273

<212> PRT

<213> Homo sapiens

<400> 3130

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			20					25					30		
Gly	Pro	Gly	Ala	Ala	Gln	Glu	Pro	Thr	Trp	Leu	Thr	Asp	Val	Pro	Ala
			35				40					45			
Ala	Met	Glu	Phe	Ile	Ala	Ala	Thr	Glu	Val	Ala	Val	Ile	Gly	Phe	Phe
	50					55					60				
Gln	Asp	Leu	Glu	Ile	Pro	Ala	Val	Pro	Ile	Leu	His	Ser	Met	Val	Gln

65		70		75		80									
Lys	Phe	Pro	Gly	Val	Ser	Phe	Gly	Ile	Ser	Thr	Asp	Ser	Glu	Val	Leu
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Thr	His	Tyr	Asn	Ile	Thr	Gly	Asn	Thr	Ile	Cys	Leu	Phe	Arg	Leu	Val
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Asp	Asn	Glu	Gln	Leu	Asn	Leu	Glu	Asp	Glu	Asp	Ile	Glu	Ser	Ile	Asp
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Ala	Thr	Lys	Leu	Ser	Arg	Phe	Ile	Glu	Ile	Asn	Ser	Leu	His	Met	Val
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Thr	Glu	Tyr	Asn	Pro	Val	Thr	Val	Ile	Gly	Leu	Phe	Asn	Ser	Val	Ile
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Gln	Ile	His	Leu	Leu	Leu	Ile	Met	Asn	Lys	Ala	Ser	Pro	Glu	Tyr	Glu
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Glu	Asn	Met	His	Arg	Tyr	Gln	Lys	Ala	Ala	Lys	Leu	Phe	Gln	Gly	Lys
			180					185					190		
Ile	Leu	Phe	Ile	Leu	Val	Asp	Ser	Gly	Met	Lys	Glu	Asn	Gly	Lys	Val
		195					200					205			
Ile	Ser	Phe	Phe	Lys	Leu	Lys	Glu	Ser	Gln	Leu	Pro	Ala	Leu	Ala	Ile
		210				215					220				
Tyr	Gln	Thr	Leu	Asp	Asp	Glu	Trp	Asp	Thr	Leu	Pro	Thr	Ala	Glu	Val
225				230					235					240	
Ser	Val	Glu	His	Val	Gln	Asn	Phe	Cys	Asp	Gly	Phe	Leu	Ser	Gly	Lys
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<210> 3131
 <211> 1544
 <212> DNA
 <213> Homo sapiens

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 420
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 720
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 1440
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<210> 3132

<211> 283

<212> PRT

<213> Homo sapiens

<400> 3132

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Gly	Ser	Thr	Gly	Thr	Ala	Glu	Gly	Gly	Asn	Met	Ser	Arg	Leu	Ser	Leu
			20					25					30		
Thr	Arg	Ser	Pro	Val	Ser	Pro	Leu	Ala	Ala	Gln	Gly	Ile	Pro	Leu	Pro
		35					40					45			
Ala	Gln	Leu	Thr	Lys	Ser	Asn	Ala	Pro	Val	His	Ile	Asp	Val	Gly	Gly
	50					55					60				
His	Met	Tyr	Thr	Ser	Ser	Leu	Ala	Thr	Leu	Thr	Lys	Tyr	Pro	Glu	Ser
65					70				75					80	
Arg	Ile	Gly	Arg	Leu	Phe	Asp	Gly	Thr	Glu	Pro	Ile	Val	Leu	Asp	Ser
			85					90						95	
Leu	Lys	Gln	His	Tyr	Phe	Ile	Asp	Arg	Asp	Gly	Gln	Met	Phe	Arg	Tyr
		100						105					110		
Ile	Leu	Asn	Phe	Leu	Arg	Thr	Ser	Lys	Leu	Leu	Ile	Pro	Asp	Asp	Phe

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Lys Asp Tyr Thr Leu Leu Tyr Glu Glu Ala Lys Tyr Phe Gln Leu Gln
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Pro Met Leu Leu Glu Met Glu Arg Trp Lys Gln Asp Arg Glu Thr Gly
145      150      155      160
Arg Phe Ser Arg Pro Cys Glu Cys Leu Val Val Arg Val Ala Pro Asp
      165      170      175
Leu Gly Glu Arg Ile Thr Leu Ser Gly Asp Lys Ser Leu Ile Glu Glu
      180      185      190
Val Phe Pro Glu Ile Gly Asp Val Met Cys Asn Ser Val Asn Ala Gly
      195      200      205
Trp Asn His Asp Ser Thr His Val Ile Arg Phe Pro Leu Asn Gly Tyr
      210      215      220
Cys His Leu Asn Ser Val Gln Val Leu Glu Arg Leu Gln Gln Arg Gly
225      230      235      240
Phe Glu Ile Val Gly Ser Cys Gly Gly Gly Val Asp Ser Ser Gln Phe
      245      250      255
Ser Glu Tyr Val Leu Arg Arg Glu Leu Arg Arg Thr Pro Arg Val Pro
      260      265      270
Ser Val Ile Arg Ile Lys Gln Glu Pro Leu Asp
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<210> 3133
 <211> 621
 <212> DNA
 <213> Homo sapiens

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<210> 3134
 <211> 51
 <212> PRT

<213> Homo sapiens

<400> 3134

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Ala	Val	Arg	Gln	Val	Pro	Ser	Ser	Cys	Ala	Ala	Ser	Arg	Lys	Asn	Glu
			20					25					30		
Thr	Glu	Val	Lys	Ser	Glu	Glu	Gly	Pro	Gly	Trp	Thr	Ile	Leu	Arg	Asp
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Asp	Phe	Met													
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<210> 3135

<211> 3166

<212> DNA

<213> Homo sapiens

<400> 3135

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1080

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<213> Homo sapiens

<400> 3142

Met	Pro	Arg	Glu	Ile	Ile	Thr	Leu	Gln	Leu	Gly	Gln	Cys	Gly	Asn	Gln
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Ile	Gly	Phe	Glu	Phe	Trp	Lys	Gln	Leu	Cys	Ala	Glu	His	Gly	Ile	Ser
			20					25					30		
Pro	Glu	Gly	Ile	Val	Glu	Glu	Phe	Ala	Thr	Glu	Gly	Thr	Asp	Arg	Lys
			35				40					45			
Asp	Val	Phe	Phe	Tyr	Gln	Ala	Asp	Asp	Glu	His	Tyr	Ile	Pro	Arg	Ala
			50			55					60				
Val	Leu	Leu	Asp	Leu	Glu	Pro	Arg	Val	Ile	His	Ser	Ile	Leu	Asn	Ser
65					70					75				80	
Pro	Tyr	Ala	Lys	Leu	Tyr	Asn	Pro	Glu	Asn	Ile	Tyr	Leu	Ser	Glu	His
			85						90					95	
Gly	Gly	Gly	Ala	Gly	Asn	Asn	Trp	Ala	Ser	Gly	Phe	Ser	Gln	Gly	Glu
			100					105					110		
Lys	Ile	His	Glu	Asp	Ile	Phe	Asp	Ile	Ile	Asp	Arg	Glu	Ala	Asp	Gly
			115				120					125			
Ser	Asp	Ser	Leu	Glu	Gly	Phe	Val	Leu	Cys	His	Ser	Ile	Ala	Gly	Gly
			130			135					140				
Thr	Gly	Ser	Gly	Leu	Gly	Ser	Tyr	Leu	Leu	Glu	Arg	Leu	Asn	Asp	Arg
145					150					155				160	
Tyr	Pro	Lys	Lys	Leu	Val	Gln	Thr	Tyr	Ser	Val	Phe	Pro	Asn	Gln	Asp
			165						170					175	
Glu	Met	Ser	Asp	Val	Val	Val	Gln	Pro	Tyr	Asn	Ser	Leu	Leu	Thr	Leu
			180					185					190		
Lys	Arg	Leu	Thr	Gln	Asn	Ala	Asp	Cys	Val	Val	Val	Leu	Asp	Asn	Thr

195	200	205
Ala Leu Asn Arg Ile	Ala Thr Asp Arg Leu His	Ile Gln Asn Pro Ser
210	215	220
Phe Ser Gln Ile Asn	Gln Leu Val Ser Thr	Ile Met Ser Ala Ser Thr
225	230	235
Thr Thr Leu Arg Tyr	Pro Gly Tyr Met Asn	Asn Asp Leu Ile Gly Leu
245	250	255
Ile Ala Ser Leu Ile	Pro Thr Pro Arg Leu	His Phe Leu Met Thr Gly
260	265	270
Tyr Thr Pro Leu Thr	Thr Asp Gln Ser Val	Ala Ser Val Arg Lys Thr
275	280	285
Thr Val Leu Asp Val	Met Arg Arg Leu Leu	Gln Pro Lys Asn Val Met
290	295	300
Val Ser Thr Gly Arg	Asp Arg Gln Thr Asn	His Cys Tyr Ile Ala Ile
305	310	315
Leu Asn Ile Ile Gln	Gly Glu Val Asp Pro	Thr Gln Val His Lys Ser
325	330	335
Leu Gln Arg Ile Arg	Glu Arg Lys Leu Ala	Asn Phe Ile Pro Trp Gly
340	345	350
Pro Ala Ser Ile Gln	Val Ala Leu Ser Arg	Lys Ser Pro Tyr Leu Pro
355	360	365
Ser Ala His Arg Val	Ser Gly Leu Met Met	Ala Asn His Thr Ser Ile
370	375	380
Ser Ser Leu Phe Glu	Arg Thr Cys Arg Gln	Tyr Asp Lys Leu Arg Lys
385	390	395
Arg Glu Ala Phe Leu	Glu Gln Phe Arg Lys	Glu Asp Met Phe Lys Asp
405	410	415
Asn Phe Asp Glu Met	Asp Thr Ser Arg Glu	Ile Val Gln Gln Leu Ile
420	425	430
Asp Glu Tyr His Ala	Ala Thr Arg Pro Asp	Tyr Ile Ser Trp Gly Thr
435	440	445
Gln Glu Gln		
450		

<210> 3143
 <211> 356
 <212> DNA
 <213> Homo sapiens

<400> 3143
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 ggagacagac cctctgcggt ggagtcctggg agtggtgtgg ttgctgcttg ggctgggctg
 120
 caggcctgag ctcttggtg gtgggaaggg gaggctgctg gtccacagtg tgggggtgct
 180
 tcacgggttaa ccaagccatc ccccatgctg ggcgtgaggc actagcggaa ttgagagcct
 240
 cagaaaccca ggtgctgctg tgtgaggctg tcgcagccac gaagatgacc atgactgcaa
 300
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 356

<210> 3144

<211> 81
 <212> PRT
 <213> Homo sapiens

<400> 3144
 Met Val Ile Phe Val Ala Ala Thr Ala Ser His Ser Ser Thr Trp Val
 1 5 10 15
 Ser Glu Ala Leu Asn Ser Ala Ser Ala Ser Arg Pro Ala Trp Gly Met
 20 25 30
 Ala Trp Leu Thr Val Lys His Pro His Thr Val Asp Gln Gln Pro Pro
 35 40 45
 Leu Pro Thr Ser Gln Glu Leu Arg Pro Ala Ala Gln Pro Lys Gln Gln
 50 55 60
 Pro His His Ser Gln Thr Pro Pro Gln Arg Val Cys Leu Arg Ala Pro
 65 70 75 80
 Ser

<210> 3145
 <211> 436
 <212> DNA
 <213> Homo sapiens

<400> 3145
 taaaagcccg gagccgctca gctatggaga agctgcgctc caaaactcca ctggcctcc
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 atccgaagag cccgattacc agctgctcgg gagggccaag caggaccggg ggaggccaaa
 120
 ctccgaggag cccgctccac ctgccctcag gaggggtgttt aaaacggagg ttgccaccgt
 180
 ttacgcacct gccctcagtg ccagggcccc cgagcctggt ttgtcagact ctgcagccgc
 240
 cagccagtgg tcaactctgcc cggcagatga cgagcggagg agagccacac atctcaacgg
 300
 gctccaggcg ccctcggaaa ctgccctggc ctgctcacc ccatgcagt gctgtcccc
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 cgaatgtagt gagcagccgt cgcagactca caccgcccg gggctgggga accagctaag
 420
 tcccacagcg gttgct
 436

<210> 3146
 <211> 131
 <212> PRT
 <213> Homo sapiens

<400> 3146
 Met Glu Lys Leu Arg Ser Lys Thr Pro Leu Gly Leu His Pro Lys Ser
 1 5 10 15
 Pro Ile Thr Ser Cys Ser Gly Gly Pro Ser Arg Thr Gly Gly Gly Gln
 20 25 30
 Thr Pro Arg Ser Pro Leu His Leu Pro Ser Gly Gly Cys Leu Lys Arg
 35 40 45
 Arg Leu Pro Pro Phe Thr His Leu Pro Ser Val Pro Gly Pro Pro Ser

50		55		60
Leu Val Cys Gln Thr	Leu Gln Pro Pro Ala Ser Gly His Ser Ala Arg			
65	70	75	80	
Gln Met Thr Ser Gly Gly Glu Pro His Ile Ser Thr Gly Ser Arg Arg				
	85	90	95	
Pro Arg Lys Leu Pro Trp Pro Ala His Pro Arg Cys Ser Ala Cys Pro				
	100	105	110	
Pro Asn Val Val Ser Ser Arg Arg Arg Leu Thr Pro Arg Arg Gly Trp				
	115	120	125	
Gly Thr Ser				
130				

<210> 3147

<211> 3106

<212> DNA

<213> Homo sapiens

<400> 3147

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 120
 gccgagcgcg aggtgtcggc gccaccttc agctgggagg agattcagaa gcataacctg
 180
 cgcaccgaca ggtggctggc cattgaccgc aagggtttaca acatcaccaa atggtccatc
 240
 cagcaccggg ggggccagcg ggtcatcggg cactacgctg gagaagatgc aacggatgcc
 300
 ttccgcgcct tccaccctga cctggaattc gtgggcaagt tcttgaaacc cctgctgatt
 360
 ggtgaactgg ccccgaggga gccagccag gaccacggca agaactcaaa gatcactgag
 420
 gacttccggg ccctgaggaa gacggctgag gacatgaacc tgttcaagac caaccacgtg
 480
 ttcttctctc tcttctggc ccacatcatc gccctggaga gcattgcatg gttcactgtc
 540
 ttttactttg gcaatggctg gattcctacc ctcatcacgg cctttgtcct tgctacctct
 600
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 660
 aagtggaaacc accttgcca caaatcgtc attggccact taaaggggtgc ctctgccaac
 720
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 780
 gatgtgaaca tgctgcacgt gtttgttctg ggcgaatggc agcccatcga gtacggcaag
 840
 aagaagctga aatacctgcc ctacaatcac cagcacgaat acttcttctt gattggggccg
 900
 ccgctgctca tccccatgta tttccagtac cagatcatca tgaccatgat cgtccataag
 960
 aactgggtgg acctggcctg ggccgtcagc tactacatcc ggttcttcat cacctacatc
 1020
 cctttctacg gcatectggg agccctcctt ttcctcaact tcatcagggt cctggagagc
 1080

cactggtttg tgtgggtcac acagatgaat cacatcgtca tggagattga ccaggaggcc
1140
taccgtgact ggttcagtag ccagctgaca gccacctgca acgtggagca gtccttcttc
1200
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1260
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1380
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1440
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1560
tttctcctct cctttttctc ttcacatctc ccccatagca ccctgccctc atgggacctg
1620
ccctccctca gccgtcagcc atcagccatg gccctcccag tgccctcctag ccccttcttc
1680
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1740
aagatgggag gagaccagcg gtccatgggt ctggcctgtg agtctccctc tgcagcctgg
1800
tcactaggca tcacccccgc tttgggttctt cagatgctct tggggttcat aggggcaggt
1860
cctagtcggg cagggccctt gacctcccg gcctggcttc actctccctg acggctgcca
1920
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2040
gccagcccaa accttgggcc ctggaagagt cctccacccc atcactagag tgctctgacc
2100
ctgggcttct acgggcccc a tccaccgcc tccccactt gagcctgtga ccttgggacc
2160
aaagggggag tccctcgtct cttgtgactc agcagaggca gtggccacgt tcaggagggg
2220
gccggctggc ctggaggctc agcccacct ccagcttttc ctcagggtgt cctgaggtec
2280
aagattctgg agcaatctga cccttctcca aaggctctgt tatcagctgg gcagtgccag
2340
ccaatccctg gccatttggc cccaggggac gtgggacctg caggctgcag gagggcactg
2400
gagctgggag gtctcgtccc agccctcccc atctcggggc tgctgtgtgg acggcgctgc
2460
ctcaggcact ctctgtctg aacctgccct tactgtgttt aacctgttgc tccaggatgc
2520
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2580
ccttgcctcg gtggccctga ctgtcaggga gggccaggga ggcagagcgg gagggagtct
2640
caggaggagg ctgccctgag gggctgggga gggggtacct catgaggacc aggggtggagc
2700

tgagaagagg aggaggtggg ggctggaggt gctggtagct gaggggacgg gcaagtgaga
 2760
 ggggagggag ggaagtcctg ggaggatcct gagctgctgt tgcagtctaa cccactaatc
 2820
 agttcttaga ttcaggggaa gggcaggcac caacaactca gaatgggggc ttccggggag
 2880
 ggcgcctagt ccccccagct ctaagcagcc aggagggacc tgcacttaag catctggggt
 2940
 gccatggcaa tggcatgccc ccagctact gtatgcccc gacccccgca gaggcagaat
 3000
 gaaccatag ggagctgac gtaatgttta tcatgttact tccccacccc tacatttttt
 3060
 gaaataaaat aaggaatttt attctcaaaa aaaaaaaaaa aaaaaa
 3106

<210> 3148
 <211> 444
 <212> PRT
 <213> Homo sapiens

<400> 3148
 Met Gly Lys Gly Gly Asn Gln Gly Glu Gly Ala Ala Glu Arg Glu Val
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 Ser Val Pro Thr Phe Ser Trp Glu Glu Ile Gln Lys His Asn Leu Arg
 20 25 30
 Thr Asp Arg Trp Leu Val Ile Asp Arg Lys Val Tyr Asn Ile Thr Lys
 35 40 45
 Trp Ser Ile Gln His Pro Gly Gly Gln Arg Val Ile Gly His Tyr Ala
 50 55 60
 Gly Glu Asp Ala Thr Asp Ala Phe Arg Ala Phe His Pro Asp Leu Glu
 65 70 75 80
 Phe Val Gly Lys Phe Leu Lys Pro Leu Leu Ile Gly Glu Leu Ala Pro
 85 90 95
 Glu Glu Pro Ser Gln Asp His Gly Lys Asn Ser Lys Ile Thr Glu Asp
 100 105 110
 Phe Arg Ala Leu Arg Lys Thr Ala Glu Asp Met Asn Leu Phe Lys Thr
 115 120 125
 Asn His Val Phe Phe Leu Leu Leu Leu Ala His Ile Ile Ala Leu Glu
 130 135 140
 Ser Ile Ala Trp Phe Thr Val Phe Tyr Phe Gly Asn Gly Trp Ile Pro
 145 150 155 160
 Thr Leu Ile Thr Ala Phe Val Leu Ala Thr Ser Gln Ala Gln Ala Gly
 165 170 175
 Trp Leu Gln His Asp Tyr Gly His Leu Ser Val Tyr Arg Lys Pro Lys
 180 185 190
 Trp Asn His Leu Val His Lys Phe Val Ile Gly His Leu Lys Gly Ala
 195 200 205
 Ser Ala Asn Trp Trp Asn His Arg His Phe Gln His His Ala Lys Pro
 210 215 220
 Asn Ile Phe His Lys Asp Pro Asp Val Asn Met Leu His Val Phe Val
 225 230 235 240
 Leu Gly Glu Trp Gln Pro Ile Glu Tyr Gly Lys Lys Lys Leu Lys Tyr
 245 250 255
 Leu Pro Tyr Asn His Gln His Glu Tyr Phe Phe Leu Ile Gly Pro Pro

260						265						270			
Leu	Leu	Ile	Pro	Met	Tyr	Phe	Gln	Tyr	Gln	Ile	Ile	Met	Thr	Met	Ile
275						280						285			
Val	His	Lys	Asn	Trp	Val	Asp	Leu	Ala	Trp	Ala	Val	Ser	Tyr	Tyr	Ile
290						295						300			
Arg	Phe	Phe	Ile	Thr	Tyr	Ile	Pro	Phe	Tyr	Gly	Ile	Leu	Gly	Ala	Leu
305						310						315			
Leu	Phe	Leu	Asn	Phe	Ile	Arg	Phe	Leu	Glu	Ser	His	Trp	Phe	Val	Trp
320						325						330			
Val	Thr	Gln	Met	Asn	His	Ile	Val	Met	Glu	Ile	Asp	Gln	Glu	Ala	Tyr
335						340						345			
Arg	Asp	Trp	Phe	Ser	Ser	Gln	Leu	Thr	Ala	Thr	Cys	Asn	Val	Glu	Gln
350						355						360			
Ser	Phe	Phe	Asn	Asp	Trp	Phe	Ser	Gly	His	Leu	Asn	Phe	Gln	Ile	Glu
365						370						375			
His	His	Leu	Phe	Pro	Thr	Met	Pro	Arg	His	Asn	Leu	His	Lys	Ile	Ala
380						385						390			
Pro	Leu	Val	Lys	Ser	Leu	Cys	Ala	Lys	His	Gly	Ile	Glu	Tyr	Gln	Glu
395						400						405			
Lys	Pro	Leu	Leu	Arg	Ala	Leu	Leu	Asp	Ile	Ile	Arg	Ser	Leu	Lys	Lys
410						415						420			
Ser	Gly	Lys	Leu	Trp	Leu	Asp	Ala	Tyr	Leu	His	Lys				
425						430						435			
440						445						450			

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<210> 3149
<211> 1006
<212> DNA
<213> Homo sapiens
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<400> 3149
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120
gctgcccact  ccgcgtctga  ggaggtgcgg  gagctcgagg  gcaagaccgg  cttctcatcg
180
gatcagatcg  agcagctcca  tcggagattt  aagcagctga  gtggagatca  gcctaccatt
240
cgcaaggaga  acttcaacaa  tgtcccggac  ctggagctca  accccatccg  atccaaaatt
300
gttcgtgcct  tcttcgacaa  caggaacctg  cgcaagggac  ccagtggcct  ggctgatgag
360
atcaatttcg  aggacttcct  gaccatcatg  tcctacttcc  ggcccatcga  caccaccatg
420
gacgaggaac  aggtggagct  gtcccggaag  gagaagctga  gatttctgtt  ccacatgtac
480
gactcggaca  gcgacggccg  catcactctg  gaagaatatc  gaaatgtaaa  gtggtcgagg
540
agctgctgtc  gggaaaccct  cacatcgaga  aggagtccgc  tcgctccatc  gccgacgggg
600
ccatgatgga  ggcgggccagc  gtgtgcatgg  ggcagatgga  gcctgatcag  gtgtacgagg
660
ggatcacctt  cgaggacttc  ctgaagatct  ggcaggggat  cgacattgag  accaagatgc
720

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acgtccgctt ccttaacatg gaaaccatgg ccctctgcc a ctgacccacc gccacctccg
 780
 cggagaaact gcactttgca atggggccgc ctccccgcgt agctggagca gcccaggccc
 840
 ggcggacagc ctcttcctgc agcgccggta catagccaag gctcgtctgc gcaccttctg
 900
 tctttagagg tatggtatgt gggacttcgc tgtttttatc tccaataaaa aaaaaaaaaa
 960
 ggtttgttaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa
 1006

<210> 3150

<211> 201

<212> PRT

<213> Homo sapiens

<400> 3150

Xaa	Ser	Pro	Ala	Ser	Arg	Pro	Glu	Ala	Gly	Pro	Glu	Ala	Ser	Pro	Ala
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Ala	Ala	Thr	Glu	Ala	Ser	Ala	Gly	Pro	Glu	Arg	Asp	Ala	Arg	Pro	Gly
		20					25						30		
Ala	Pro	Ala	Ala	Gly	Thr	Met	Gly	Ala	Ala	His	Ser	Ala	Ser	Glu	Glu
		35					40					45			
Val	Arg	Glu	Leu	Glu	Gly	Lys	Thr	Gly	Phe	Ser	Ser	Asp	Gln	Ile	Glu
	50					55					60				
Gln	Leu	His	Arg	Arg	Phe	Lys	Gln	Leu	Ser	Gly	Asp	Gln	Pro	Thr	Ile
65					70					75				80	
Arg	Lys	Glu	Asn	Phe	Asn	Asn	Val	Pro	Asp	Leu	Glu	Leu	Asn	Pro	Ile
			85						90					95	
Arg	Ser	Lys	Ile	Val	Arg	Ala	Phe	Phe	Asp	Asn	Arg	Asn	Leu	Arg	Lys
		100						105					110		
Gly	Pro	Ser	Gly	Leu	Ala	Asp	Glu	Ile	Asn	Phe	Glu	Asp	Phe	Leu	Thr
		115					120					125			
Ile	Met	Ser	Tyr	Phe	Arg	Pro	Ile	Asp	Thr	Thr	Met	Asp	Glu	Glu	Gln
	130					135					140				
Val	Glu	Leu	Ser	Arg	Lys	Glu	Lys	Leu	Arg	Phe	Leu	Phe	His	Met	Tyr
145					150					155				160	
Asp	Ser	Asp	Ser	Asp	Gly	Arg	Ile	Thr	Leu	Glu	Glu	Tyr	Arg	Asn	Val
			165					170					175		
Lys	Trp	Ser	Arg	Ser	Cys	Cys	Arg	Glu	Thr	Leu	Thr	Ser	Arg	Arg	Ser
		180						185					190		
Pro	Leu	Ala	Pro	Ser	Pro	Thr	Gly	Pro							
		195					200								

<210> 3151

<211> 2079

<212> DNA

<213> Homo sapiens

<400> 3151

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 120

cctgggcctc tcggtggagc agggacccga accggtgccc atccagtcgc gtgccatctg
180
aagccccctt cccagaaaat gagccacaga gcaagctgac cccagcgaca cagcccccca
240
gccctactat atttccgttc ctatcaaaaa atggatgact cggagacagg tttcaatctg
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420
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480
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540
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660
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720
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1020
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1080
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1140
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1200
cagagcaggc aggggtgggg gccgggcccg caagagcccg aaaggtcgcc accccctagc
1260
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1380
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1440
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1560
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1620
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1680
cccagcccag cccaaggccc ccaggagctg ggactctgct acaccagtg aaatgctgtg
1740

tcccttctcc cccgtgcccc ttgatgcccc ctccccacag tgctcaggag acccgtgggg
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 1920
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 1980
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 2040
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 2079

<210> 3152
 <211> 214
 <212> PRT
 <213> Homo sapiens

<400> 3152
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 Phe Lys Gln Cys Leu Asp Glu Lys Glu Glu Val Leu Leu Asp Pro Tyr
 20 25 30
 Ile Ala Ser Trp Lys Gly Leu Val Arg Phe Leu Asn Ser Leu Gly Thr
 35 40 45
 Ile Phe Ser Phe Ile Ser Lys Asp Val Val Ser Lys Leu Arg Ile Met
 50 55 60
 Glu Arg Leu Arg Gly Gly Pro Gln Ser Glu His Tyr Arg Ser Leu Gln
 65 70 75 80
 Ala Met Val Ala His Glu Leu Ser Asn Arg Leu Val Asp Leu Glu Gly
 85 90 95
 Arg Ser His His Pro Glu Ser Gly Cys Arg Thr Val Leu Arg Leu His
 100 105 110
 Arg Ala Leu His Trp Leu Gln Leu Phe Leu Glu Gly Leu Arg Thr Ser
 115 120 125
 Pro Glu Asp Ala Arg Thr Ser Ala Leu Cys Ala Asp Ser Tyr Asn Ala
 130 135 140
 Ser Leu Ala Ala Tyr His Pro Trp Val Val Arg Arg Ala Val Thr Val
 145 150 155 160
 Ala Phe Cys Thr Leu Pro Thr Arg Glu Val Phe Leu Glu Ala Met Asn
 165 170 175
 Val Gly Pro Pro Glu Gln Ala Val Gln Met Leu Gly Glu Ala Leu Pro
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 Ser Leu Leu Asp Leu Pro
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<210> 3153
 <211> 1498
 <212> DNA
 <213> Homo sapiens

<400> 3153

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<210> 3154

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<212> PRT

<213> Homo sapiens

<400> 3154

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Ser Gly His Arg Trp Gly Ile Thr Leu Pro Thr Arg Asp Ser Arg His
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Gly
65

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<210> 3155

<211> 551

<212> DNA

<213> Homo sapiens

<400> 3155

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240
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<210> 3156

<211> 178

<212> PRT

<213> Homo sapiens

<400> 3156

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Thr Ala Ser Thr Asn Cys Asp Ser Ser Ser Glu Gly Leu Glu Lys Asp
          35          40          45
Thr Ala Thr Gln Arg Ser Asp Gln Thr Cys Leu Glu Pro Ser Cys Ser

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50	55	60
Cys Ser Ser Glu Asn Gln Glu Cys Gln Thr Ala Ala Ser Pro Gly Glu		
65	70	75
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	85	90
Leu Asp Phe Phe Ser Val Lys Asn Pro Phe Lys Lys Met Phe Thr Gln		95
	100	105
Glu Glu Tyr Lys Ile Leu Gln Glu Leu Tyr Gln Phe Lys Lys Pro Gly		110
	115	120
Thr Asn Leu Thr Glu Glu Asp Leu Val Asp Ile Val Asp Thr Arg Ile		125
	130	135
His Gln Leu Glu Asp Leu Glu Ala Thr Phe Ala Asp Leu Cys Asp Gly		140
145	150	155
Asp Asp Glu Glu Thr Val Gln Gly Trp Ala Ser Asn Pro Gly Met Glu		160
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		175
Ser Leu		

<210> 3157

<211> 903

<212> DNA

<213> Homo sapiens

<400> 3157

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<210> 3158
<211> 92
<212> PRT
<213> Homo sapiens

<400> 3158
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35 40 45
Met Gln Glu Ser Pro Leu Gly Leu Gln Val Lys Glu Glu Ser Glu Val
50 55 60
Thr Glu Asp Ser Asp Phe Leu Glu Ser Gly Pro Leu Ala Ala Thr Gln
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<210> 3159
<211> 2408
<212> DNA
<213> Homo sapiens

<400> 3159
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780

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<210> 3160

<211> 431

<212> PRT

<213> Homo sapiens

<400> 3160

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			20					25					30		
Glu	Lys	Leu	Leu	Glu	Lys	Tyr	Met	Asp	Glu	Asp	Gly	Glu	Trp	Trp	Ile
		35					40					45			
Ala	Lys	Gln	Arg	Gly	Lys	Arg	Ala	Ile	Thr	Asp	Asn	Asp	Met	Gln	Ser
	50					55					60				
Ile	Leu	Asp	Leu	His	Asn	Lys	Leu	Arg	Ser	Gln	Val	Tyr	Pro	Thr	Ala
65					70					75					80
Ser	Asn	Met	Glu	Tyr	Met	Thr	Trp	Asp	Val	Glu	Leu	Glu	Arg	Ser	Ala
				85				90						95	
Glu	Ser	Trp	Ala	Glu	Ser	Cys	Leu	Trp	Glu	His	Gly	Pro	Ala	Ser	Leu
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Leu	Pro	Ser	Ile	Gly	Gln	Asn	Leu	Gly	Ala	His	Trp	Gly	Arg	Tyr	Arg
		115					120					125			
Pro	Pro	Thr	Phe	His	Val	Gln	Ser	Trp	Tyr	Asp	Glu	Val	Lys	Asp	Phe
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Ser	Tyr	Pro	Tyr	Glu	His	Glu	Cys	Asn	Pro	Tyr	Cys	Pro	Phe	Arg	Cys
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Ser	Gly	Pro	Val	Cys	Thr	His	Tyr	Thr	Gln	Val	Val	Trp	Ala	Thr	Ser
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Asn	Arg	Ile	Gly	Cys	Ala	Ile	Asn	Leu	Cys	His	Asn	Met	Asn	Ile	Trp
			180					185					190		
Gly	Gln	Ile	Trp	Pro	Lys	Ala	Val	Tyr	Leu	Val	Cys	Asn	Tyr	Ser	Pro
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Tyr	Lys	Glu	Gly	Ser	Asp	Arg	Tyr	Tyr	Pro	Pro	Arg	Glu	Glu	Glu	Thr
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			260					265					270		
Thr	Arg	Ser	Asp	Asp	Ser	Ser	Arg	Asn	Glu	Val	Ile	Ser	Ala	Gln	Gln
		275					280						285		
Met	Ser	Gln	Ile	Val	Ser	Cys	Glu	Val	Arg	Leu	Arg	Asp	Gln	Cys	Lys
	290					295						300			
Gly	Thr	Thr	Cys	Asn	Arg	Tyr	Glu	Cys	Pro	Ala	Gly	Cys	Leu	Asp	Ser
305					310					315					320
Lys	Ala	Lys	Val	Ile	Gly	Ser	Val	His	Tyr	Glu	Met	Gln	Ser	Ser	Ile
				325					330					335	
Cys	Arg	Ala	Ala	Ile	His	Tyr	Gly	Ile	Ile	Asp	Asn	Asp	Gly	Gly	Trp
		340						345					350		
Val	Asp	Ile	Thr	Arg	Gln	Gly	Arg	Lys	His	Tyr	Phe	Ile	Lys	Ser	Asn

355	360	365
Arg Asn Gly Ile Gln Thr	Ile Gly Lys Tyr Gln Ser	Ala Asn Ser Phe
370	375	380
Thr Val Ser Lys Val Thr	Val Gln Ala Val Thr	Cys Glu Thr Thr Val
385	390	395
Asp Ser Ser Val His Phe	Ile Ser Leu Leu His	Ile Ala Gln Glu Tyr
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<210> 3161

<211> 1197

<212> DNA

<213> Homo sapiens

<400> 3161

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<211> 386
<212> PRT
<213> Homo sapiens
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Gly Asp Leu Leu Phe Leu Phe Pro Ser Ser Leu Ala Gly Pro Ser Ser	
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Glu Met Glu Thr Ser Val Pro Pro Gly Phe Lys Val Phe Gly Ala Pro	
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Asn Val Val Glu Asp Glu Ile Asp Gln Tyr Leu Ser Lys Gln Asp Gly	
85 90 95	
Lys Ile Tyr Arg Ser Arg Asp Pro Gln Leu Cys Arg His Gly Pro Leu	
100 105 110	
Gly Lys Cys Val His Cys Val Pro Leu Glu Pro Phe Asp Glu Asp Tyr	
115 120 125	
Leu Asn His Leu Glu Pro Pro Val Lys His Met Ser Phe His Ala Tyr	
130 135 140	
Ile Arg Lys Leu Thr Gly Gly Ala Asp Lys Gly Lys Phe Val Ala Leu	
145 150 155 160	
Glu Asn Ile Ser Cys Lys Ile Lys Ser Gly Cys Glu Gly His Leu Pro	
165 170 175	
Trp Pro Asn Gly Ile Cys Thr Lys Cys Gln Pro Ser Ala Ile Thr Leu	
180 185 190	
Asn Arg Gln Lys Tyr Arg His Val Asp Asn Ile Met Phe Glu Asn His	
195 200 205	
Thr Val Ala Asp Arg Phe Leu Asp Phe Trp Arg Lys Thr Gly Asn Gln	
210 215 220	
His Phe Gly Tyr Leu Tyr Gly Arg Tyr Thr Glu His Lys Asp Ile Pro	
225 230 235 240	
Leu Gly Ile Arg Ala Glu Val Ala Ala Ile Tyr Glu Pro Pro Gln Ile	
245 250 255	
Gly Thr Gln Asn Ser Leu Glu Leu Leu Glu Asp Pro Lys Ala Glu Val	
260 265 270	
Val Asp Glu Ile Ala Ala Lys Leu Gly Leu Arg Lys Val Gly Trp Ile	
275 280 285	
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Ser Arg Asn Lys Asp Thr Tyr Phe Leu Ser Ser Glu Glu Cys Ile Thr	
305 310 315 320	
Ala Gly Asp Phe Gln Asn Lys His Pro Asn Met Cys Arg Leu Ser Pro	
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Asp Gly His Phe Gly Ser Lys Phe Val Thr Ala Val Ala Thr Gly Gly	
340 345 350	
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 Val Cys
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<210> 3163
 <211> 1075
 <212> DNA
 <213> Homo sapiens

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<210> 3164
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 <212> PRT
 <213> Homo sapiens

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 His Gln Asp Ala Leu Pro Trp Gln Arg Cys Tyr His Pro Cys Ser Ser
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 Ser Ser Val Pro Pro Arg Gln Ala Cys Ala Ser Pro Ala Ser Cys Ser
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 <212> DNA
 <213> Homo sapiens

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<213> Homo sapiens

<400> 3166

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Cys Lys Leu Leu Asp Val Thr Gly Gly Leu Gly Thr Asp Glu Leu Arg
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Arg Lys Thr Lys Phe Ala Lys Val Pro Leu Lys Cys Leu Ala Gln Glu
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Lys Lys Met Pro His Ile Asn Asp Cys Arg Arg Gly Cys Tyr Phe Val
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<211> 2730

<212> DNA

<213> Homo sapiens

<400> 3167

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<212> PRT

<213> Homo sapiens

<400> 3168

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 <212> PRT
 <213> Homo sapiens

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 35 40 45
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 50 55 60
 Gln Asp Leu Asp Trp Ile Asp Ala Gln Gly Ala Thr Leu Leu His Ile
 65 70 75 80
 Ala Gly Ala Asn Gly Tyr Leu Arg Ala Ala Glu Leu Leu Leu Asp His
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 Gly Val Arg Val Asp Val Lys Asp Trp Asp Gly Trp Glu Pro Leu His
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 His Gly Ala Ser Leu Ser Ala Arg Thr Ser Met Asp Glu Met Pro Ile
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 His Lys His Asp Val Ile Met Lys Ser Gln Leu Arg His Lys Ser Ser
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 Ser Thr Tyr Asn Gly Asp Ile Arg Glu Thr Arg Thr Asp Gln Glu Asn
 225 230 235 240
 Lys Asp Pro Asn Pro Arg Leu Glu Lys Pro Val Leu Leu Ser Glu Phe
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	325	330
Leu Leu Ser His Pro Phe Leu Ser Thr His Leu Gly Ser Ser Met Ala		335
	340	345
Arg Thr Gly Glu Ser Ser Ser Glu Gly Lys Ala Xaa Leu Ile Gly Gly		350
	355	360
Arg Thr Ser Pro Tyr Ser Ser Asn Gly Thr Ser Val Tyr Tyr Thr Val		365
	370	375
Thr Ser Gly Asp Pro Pro Leu Leu Lys Phe Lys Ala Pro Ile Glu Glu		380
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Met Glu Glu Lys Val His Gly Cys Cys Arg Ile Ser		395
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<211> 753

<212> DNA

<213> Homo sapiens

<400> 3171

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<210> 3172

<211> 228

<212> PRT

<213> Homo sapiens

<400> 3172

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Arg Tyr Ser Val Ser Leu Leu Gly Tyr Gly Phe Tyr Gly Asp Ile Ile
65           70           75           80
Lys Asp Ser Glu Lys Lys Arg Trp Leu Gly Leu Ala Arg Tyr Asp Phe
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Ser Gly Leu Lys Thr Phe Leu Ser His His Cys Tyr Glu Gly Thr Val
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Ser Phe Leu Pro Ala Gln His Thr Val Gly Ser Pro Arg Asp Arg Lys
           115          120          125
Pro Cys Arg Ala Gly Cys Phe Val Cys Arg Gln Ser Lys Gln Gln Leu
           130          135          140
Glu Glu Glu Gln Lys Lys Ala Leu Tyr Gly Leu Glu Ala Ala Glu Asp
145          150          155          160
Val Glu Glu Trp Gln Val Val Cys Gly Lys Phe Leu Ala Ile Asn Ala
           165          170          175
Thr Asn Met Ser Cys Ala Cys Arg Arg Ser Pro Arg Gly Leu Ser Pro
           180          185          190
Ala Ala His Leu Gly Asp Gly Ser Ser Asp Leu Ile Leu Ile Arg Lys
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Cys Ser Arg Phe Asn Phe Leu Arg Phe Leu Ile Trp His Glu Val Cys
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Lys Lys Pro Leu
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<210> 3173

<211> 573

<212> DNA

<213> Homo sapiens

<400> 3173

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420

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 35 40 45
 Val Ala Gln Tyr Phe Arg Glu Lys Tyr Thr Leu Gln Leu Lys Tyr Pro
 50 55 60
 His Leu Pro Cys Leu Gln Val Gly Gln Glu Gln Lys His Thr Tyr Leu
 65 70 75 80
 Pro Leu Glu Val Cys Asn Ile Val Ala Gly Gln Arg Cys Ile Lys Lys
 85 90 95
 Leu Thr Asp Asn Gln Thr Ser Thr Met Ile Lys Ala Thr Ala Arg Ser
 100 105 110
 Ala Pro Asp Arg Gln Glu Glu Ile Ser Arg Leu Val Arg Ser Ala Asn
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 <211> 948
 <212> DNA
 <213> Homo sapiens

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 <211> 92
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Arg Gly Asn Glu Tyr Gln Pro Ser Asn Ile Lys Arg Lys Asn Lys His
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 Gly Trp Val Arg Arg Leu Ser Thr Pro Ala Gly Val Gln Val Ile Leu
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 <211> 1857
 <212> DNA
 <213> Homo sapiens

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 <212> PRT
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 50 55 60
 Val Asn Ala Ser Ala Ser Cys His Val Leu Pro Thr Gly Asp Leu Leu
 65 70 75 80
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 Glu Gly Phe Gln Gln Leu Val Ala Ser Tyr Cys Pro Glu Val Val Glu
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 115 120 125
 Ile Ser Thr Ser Arg Val Ser Ala Pro Ala Gly Gly Lys Ala Ser Trp
 130 135 140
 Gly Ala Asp Arg Ser Tyr Trp Lys Glu Phe Leu Val Met Cys Thr Leu
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 Arg Asn Ser Met Lys Val Phe Leu Lys Gln Gly Glu Cys Ala Ser Val
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 Asn Gly Leu Gly Pro Pro Ser Thr Pro Leu Asp His Arg Gly Tyr Gln
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 Ser Leu Ser Asp Ser Pro Pro Gly Ala Arg Val Phe Thr Glu Ser Glu
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 <212> DNA
 <213> Homo sapiens

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caatcaactg cagaaaccac tcctagactc tggaccccat agcagagttt ttttttttg
3420

gttatacttt tttttccact ttgctt
3447

<210> 3180
<211> 127
<212> PRT
<213> Homo sapiens

<400> 3180
Met Ser Phe Thr Asn Lys Ser Arg Gln Val Ser Gln Pro Glu Ile Ser
1 5 10 15
Thr Gln Thr Asp Gly Arg Asp Val Asn Ser Cys Leu Lys Leu Arg Cys
20 25 30
Ala Phe Thr Pro Thr Gly Lys Val Lys Leu Thr Phe Val Phe Leu Phe
35 40 45
Asn Asn Phe Met Ile Asn Lys Glu Leu Gln Leu Glu Thr Lys Ala Asn
50 55 60
Ser Arg Asn Ser Leu Thr Pro Ser Cys Pro Met Val Phe Met Ile Ala
65 70 75 80
Cys Tyr Gln Asn Glu Ala Leu Cys Ser Thr Leu Tyr Ser Lys Ala Phe
85 90 95
Tyr Ala Pro Thr Arg Pro Ser Gly Ile Pro Glu Ser Ala Leu His Thr
100 105 110
Gly Arg Lys Thr Ala Ser Ser Tyr Arg Leu Cys Glu Asn Thr Gln
115 120 125

<210> 3181
<211> 287
<212> DNA
<213> Homo sapiens

<400> 3181
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ggacgcgcgc cgcaacaagt gccgcattcg cctggggcggg cacatgaagc aggggggcct
120
cctcaaggac ggctgggctt ctccctgcac tcgcagctcg ccaagttcct gttggaccgg
180
tacatttctt caggctgtgt cctctgtgca ggtcctgagc ttttgctctc aaaaggtctg
240
cagtatctgg tgctcttgtc tcatgccccca caccggagat gcaccct
287

<210> 3182
<211> 95
<212> PRT
<213> Homo sapiens

<400> 3182
Met Ala Ser Ser Pro Ala Val Asp Val Ser Cys Arg Arg Arg Gly Glu
1 5 10 15
Arg Arg Gln Leu Asp Ala Arg Arg Asn Lys Cys Arg Ile Arg Leu Gly
20 25 30
Gly His Met Lys Gln Gly Gly Leu Leu Lys Asp Gly Trp Ala Ser Pro

	35					40					45						
Cys	Thr	Arg	Ser	Ser	Pro	Ser	Ser	Cys	Trp	Thr	Gly	Thr	Leu	Leu	Gln		
	50					55					60						
Ala	Val	Ser	Ser	Val	Gln	Val	Leu	Ser	Phe	Cys	Leu	Gln	Lys	Val	Cys		
65					70					75					80		
Ser	Ile	Trp	Cys	Ser	Cys	Leu	Met	Pro	His	Thr	Gly	Asp	Ala	Pro			
				85				90						95			

<210> 3183

<211> 1457

<212> DNA

<213> Homo sapiens

<400> 3183

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120
aaagtctctcc ctgagagctg caggctgtcc tggaatctcc tcggggatga ggcagctgcc
180
gagctggccc aggtgctgcc gcagatgggc cggctgaaga gagtggacct ggagaagaat
240
cagatcacag ctttgggggc ctggctcctg gctgaaggac tggcccaggg gtctagcatc
300
caagtcatcc gcctctggaa taacccatt ccctgcgaca tggcccagca cctgaagagc
360
caggagccca ggctggactt tgccttcttt gacaaccagc cccaggcccc ttgggggtact
420
tgatggcccc ctcaagacct ttggaatcca gccaaagtga gcacccaaat gatccacctt
480
tcgcccactg ggataaatga ctcaggaaag aagagcctcg gcagggcgct ctgcactcca
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720
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840
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1140
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1200

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tgtaagggac aaagccaggt ctaatggtac tgggtagggg gcactgccaa gacaataagc
1260
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1320
atgttaccca gtgttcttgt tacttccaag gagaaccaag aatggctctg tcacactcga
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1440
aaaaaaaaaa aaaaaaa
1457

<210> 3184

<211> 140

<212> PRT

<213> Homo sapiens

<400> 3184

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Pro	Gln	Leu	Ile	Thr	His	Ile	Pro	Arg	Asn	Ala	Gly	Tyr	Ser	Phe	Val
			20					25					30		
Gln	Thr	Gln	Leu	Leu	Val	Pro	Lys	Lys	Val	Leu	Pro	Glu	Ser	Cys	Arg
		35					40					45			
Leu	Ser	Trp	Asn	Leu	Leu	Gly	Asp	Glu	Ala	Ala	Ala	Glu	Leu	Ala	Gln
	50					55					60				
Val	Leu	Pro	Gln	Met	Gly	Arg	Leu	Lys	Arg	Val	Asp	Leu	Glu	Lys	Asn
65				70					75					80	
Gln	Ile	Thr	Ala	Leu	Gly	Ala	Trp	Leu	Leu	Ala	Glu	Gly	Leu	Ala	Gln
			85					90					95		
Gly	Ser	Ser	Ile	Gln	Val	Ile	Arg	Leu	Trp	Asn	Asn	Pro	Ile	Pro	Cys
			100					105					110		
Asp	Met	Ala	Gln	His	Leu	Lys	Ser	Gln	Glu	Pro	Arg	Leu	Asp	Phe	Ala
		115					120					125			
Phe	Phe	Asp	Asn	Gln	Pro	Gln	Ala	Pro	Trp	Gly	Thr				
	130					135					140				

<210> 3185

<211> 1433

<212> DNA

<213> Homo sapiens

<400> 3185

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120
cctggtaacc tgaggaggtg tagagcacc agaaggaagg gtaaaagcag ggggcaaagc
180
ggtggccctc cttttctggg ggtcacttct gggctggggc cagctgaaac ctgtgtccaa
240
gtagctttca gggctggcca caccctaagc cttgcaaaag ggcctcctgc aagggtggc
300
ccatggggtc ccaccttcc cagccagtga ggtagcatg gtaggagtc cacatgtgtg
360

caagtgcttg tgtggaggct catgtatgca tgttgtata tgcaaagctg cacatgacaa
 420
 tgtgcatgcc agtccagagt tagatgtacc tatgcagttg ccctcaagcg aagggtcata
 480
 ttggaaaca aggatggctc taaacatgta agcgtgcatg tgggcatgta tgtatctggg
 540
 gcctaaggag gtggggaagt ggggtgtggg gtaagggctg gccttcaggg catttgcaga
 600
 aggaggagtg ggtgggaggg aaaggctggg cagagcaggg gaaggagtga aagccaggca
 660
 ggaaagtgga agaacaggag aagctcatgt aatggattac cctccacagg attatgttcc
 720
 ttgattcctg agagtttttt ctcttgattt taccctctca gtctatcact gcaagagaaa
 780
 gaggtagaaa agacaaacag accacaaaag acaagaaccc agacatatag acagacgcac
 840
 ctgttgcatg tgcattgagc agagcctggg agagaagaga gagcgtgcaa gagagagctc
 900
 agagcaggca ggcagccac cccctgcagc agtgctgggc ttcactggag cccctgcagg
 960
 aagtccagca gccctgtatg ccactcctct ggtttgtcca ggtaacaggg gtgccccgcc
 1020
 cccctcatga tcagcaccgc gtgggtgggc agctgcttca ggtgctcaaa gctgggtctga
 1080
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 1140
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 1320
 accaaaaggg tggagttggg tggtcagctc ctcccagaag acacccttg attatccagc
 1380
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 1433

<210> 3186

<211> 112

<212> PRT

<213> Homo sapiens

<400> 3186

Met	Pro	Leu	Leu	Trp	Phe	Val	Gln	Val	Thr	Gly	Val	Pro	Arg	Pro	Leu
1				5					10					15	
His	Asp	Gln	His	Pro	Val	Val	Gly	Gln	Leu	Leu	Gln	Val	Leu	Lys	Ala
			20					25					30		
Gly	Leu	Thr	His	Gly	Val	Leu	Val	Ser	Ile	Tyr	Asn	Gln	Ser	Trp	Ser
		35					40					45			
Leu	Arg	Gly	Arg	Ile	Gly	Gly	Trp	Gly	Arg	Val	Asn	Arg	Thr	Cys	His
	50				55						60				
Ser	Ile	Pro	Ser	Pro	Pro	His	Phe	Ser	Leu	Phe	Leu	Gly	Pro	Pro	His
65				70				75					80		
Met	Arg	Glu	Arg	Asp	Lys	Leu	Ala	Gln	Trp	Val	Gly	Ala	Gln	Ile	Gly

	85		90		95										
Val	Cys	Pro	Arg	Thr	Gln	Phe	Ser	Thr	Gly	Leu	Gly	Thr	Val	Val	Cys
	100							105					110		

<210> 3187
 <211> 860
 <212> DNA
 <213> Homo sapiens

<400> 3187
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 tatctaccag gagacggagt ttcgctatgt tccccagact ggttttgaac tcctggccta
 120
 aagtggctct cccgcctcgg cctcctgagt agctgggatt acagatatgt tcctaaaaca
 180
 tcctgagtt caccaccttg gccagaagtt gttctgccag acccagttga ggagaccaga
 240
 caccatgcag aggtcgtgaa gaaggtgaat gagatgatcg tcacggggca gstatggcagg
 300
 ctctttgccg tgggtgcactt tgccagccgc cagtgggaagg tgacctctga agacctgatc
 360
 ttaattggaa atgaactaga ccttgcgtgt ggagagagaa ttcgactgga gaaggtcctg
 420
 ctggttgggg cagacaactt cacgctgctt ggcaagccac tcctcgggta atggctgtga
 480
 agtgctgggc tttgtctggg gctccagggc tggacatgca gacagtggtc acagtgcaat
 540
 taggccagaa aggatcttgt tcgagtagaa gccacagtca ttgaaaagac agaatcatgg
 600
 ccaagaatca ttatgagatt caggaaaagg aaaaacttca agaagaaaag aagtaagtta
 660
 gagaaagtac cgctgggccc tgttgccacgg tgctgggtgc ccaggcgcac gcggacggag
 720
 ggtgtggggc acgtgggtct cgggacagga agcccaggca ggtctcaacc tggctgccac
 780
 tgcccacttg ccaccctcat cctagagggg gcacccagag ggtccagcct cgctcccctt
 840
 ctccctccacg ctccacgcgt
 860

<210> 3188
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 3188
 Thr Pro Gly Leu Lys Trp Ser Ser Arg Leu Gly Leu Leu Ser Ser Trp
 1 5 10 15
 Asp Tyr Arg Tyr Val Pro Lys Thr Ser Leu Ser Ser Pro Pro Trp Pro
 20 25 30
 Glu Val Val Leu Pro Asp Pro Val Glu Glu Thr Arg His His Ala Glu
 35 40 45
 Val Val Lys Lys Val Asn Glu Met Ile Val Thr Gly Gln Tyr Gly Arg


```

      50              55              60
Leu Phe Ala Val Val His Phe Ala Ser Arg Gln Trp Lys Val Thr Ser
65              70              75              80
Glu Asp Leu Ile Leu Ile Gly Asn Glu Leu Asp Leu Ala Cys Gly Glu
      85              90              95
Arg Ile Arg Leu Glu Lys Val Leu Leu Val Gly Ala Asp Asn Phe Thr
      100              105              110
Leu Leu Gly Lys Pro Leu Leu Gly
      115              120

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<210> 3189
 <211> 440
 <212> DNA
 <213> Homo sapiens

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<400> 3189
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agcctgggga agcaagtccc tgttttcagt accacctgca tccccaggg cagcatcctt
120
gactccctt ctgggccagt gctgccctgc tttctctgtc tctttcaggg tgtgctgtcc
180
gacctcacca aagtgacctg gatgcatgga atcgacctg tgggtgctggt cctgatgggtg
240
ggcatggtga tgttcaccct ggggttcgcc ggctgcgtgg gggctctgcg ggagaatatc
300
tgcttgctca actttgtgag tggccacaga gacaagagtg ggatatgatg caatggggta
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420
cctcccttat ggccctgcc
440

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<210> 3190
 <211> 111
 <212> PRT
 <213> Homo sapiens

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<400> 3190
Gly His Gly Trp Gly Arg Thr Leu Ala Trp Leu Ser Thr Arg Gly Leu
1              5              10              15
Ser Leu Gly Lys Gln Val Pro Val Phe Ser Thr Thr Cys Ile Pro Gln
      20              25              30
Gly Ser Ile Leu Asp Ser Pro Ser Gly Pro Val Leu Pro Cys Phe Leu
      35              40              45
Cys Leu Phe Gln Gly Val Leu Ser Asp Leu Thr Lys Val Thr Arg Met
      50              55              60
His Gly Ile Asp Pro Val Val Leu Val Leu Met Val Gly Met Val Met
65              70              75              80
Phe Thr Leu Gly Phe Ala Gly Cys Val Gly Ala Leu Arg Glu Asn Ile
      85              90              95
Cys Leu Leu Asn Phe Val Ser Gly His Arg Asp Lys Ser Gly Ile
      100              105              110

```

<210> 3191
 <211> 266
 <212> DNA
 <213> Homo sapiens

<400> 3191
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 accttttgcg gcagtcgcta aattgccacg ggctgtcttt gctctctcta cttcggagcg
 120
 aacagcagga caatccacac ttccgtagcc tcttggggtc ggccgccgag ccagcccggg
 180
 gcccgccgcc ccagcaccgc ttgcagggca gaaaagagaa gagagttgac aacatcgaga
 240
 tacagaaatt catctcccaa aaagcg
 266

<210> 3192
 <211> 84
 <212> PRT
 <213> Homo sapiens

<400> 3192
 Met Asn Phe Cys Ile Ser Met Leu Ser Thr Leu Phe Ser Phe Leu Pro
 1 5 10 15
 Cys Asn Gly Cys Trp Gly Gly Gly Pro Arg Ala Gly Ser Ala Ala Asp
 20 25 30
 Pro Arg Arg Leu Arg Lys Cys Gly Leu Ser Cys Cys Ser Leu Arg Ser
 35 40 45
 Arg Glu Ser Lys Asp Asp Pro Trp Gln Phe Ser Asp Cys Arg Lys Arg
 50 55 60
 Ser Arg Ser Met Ala Gln Val Ala Asp Thr Glu Gln Gly Thr Ile Ser
 65 70 75 80
 Pro Ser Ala Ser

<210> 3193
 <211> 567
 <212> DNA
 <213> Homo sapiens

<400> 3193
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 acagcctgcc tgagtgttca gatccaggct ctgccagag ctggatgtaa atttatgacc
 120
 tggagtgagt tgttttgccc ctctgagcct cagtttctcc atctgtgaaa tggggacaac
 180
 agcagttcct tccaggaggg taaaaggagg agaaaaagaa tgcagatcca gccctcggca
 240
 gagtcagcgg ttcattgcttt gcatgcaaag tgcccagccc ctggctcaaa gtctgtgttc
 300
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 360

gctggcctcg tgattcctct ctttcctgc aggccacggt tcacctactt ccccttctcc
 420
 ctgggccacc gctcctgcat cgggcagcag tttgctcaga tggaggtgaa ggtgggcatg
 480
 gcaaagctgc tgcagaggct ggagttccgg ctgggtgccc ggcagcgctt cgggctgcag
 540
 gagcaggcca cactcaagcc actggac
 567

<210> 3194
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 3194
 Met Gln Ile Gln Pro Ser Ala Glu Ser Ala Val His Ala Leu His Ala
 1 5 10 15
 Lys Cys Pro Ala Pro Gly Ser Lys Ser Val Phe Ile Gln Thr Trp Val
 20 25 30
 Asn Tyr Cys Leu Pro Tyr Val Val Pro Val Gly Thr Pro Gly Ala Ala
 35 40 45
 Gly Leu Val Ile Pro Leu Phe Pro Cys Arg Pro Arg Phe Thr Tyr Phe
 50 55 60
 Pro Phe Ser Leu Gly His Arg Ser Cys Ile Gly Gln Gln Phe Ala Gln
 65 70 75 80
 Met Glu Val Lys Val Val Met Ala Lys Leu Leu Gln Arg Leu Glu Phe
 85 90 95
 Arg Leu Val Pro Gly Gln Arg Phe Gly Leu Gln Glu Gln Ala Thr Leu
 100 105 110
 Lys Pro Leu Asp
 115

<210> 3195
 <211> 987
 <212> DNA
 <213> Homo sapiens

<400> 3195
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 120
 agccccagac acctacctcc ttggctggat cagccaaagg tgggcaagac ggttcacagc
 180
 gttcaagcat ccactttgaa acggaagagg ctaaccgttc ctttctctcg gggatcaaga
 240
 ccattttgaa gaagagcccc gagcccaagg aggatcccgc tcacctgtct gactcgtcct
 300
 catcctccgg ctccatcgtg tccttcaaaa gtgctgacag catcaaaagt cgaccaggaa
 360
 tcccacgact tgcgggtgac ggtggcgagc gaacgtcccc cgagcggaga gagccaggga
 420
 cggggaggaa agacgacgat gttgagagca taatgaagaa atacctccag aagtaggaac
 480

cagttcagcc tccttgaagc tgcccttgaa gacttcccga ctctacaata acttgagagac
 540
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 720
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 840
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 960
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 987

<210> 3196

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3196

Met	Glu	Glu	Pro	Leu	Gly	Ser	Asp	Pro	Phe	Ser	Trp	Lys	Leu	Pro	Ser
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Leu	Asp	Tyr	Glu	Arg	Lys	Thr	Lys	Val	Asp	Phe	Asp	Asp	Phe	Leu	Pro
			20					25					30		
Ala	Ile	Arg	Lys	Pro	Gln	Thr	Pro	Thr	Ser	Leu	Ala	Gly	Ser	Ala	Lys
			35				40					45			
Gly	Gly	Gln	Asp	Gly	Ser	Gln	Arg	Ser	Ser	Ile	His	Phe	Glu	Thr	Glu
	50					55					60				
Glu	Ala	Asn	Arg	Ser	Phe	Leu	Ser	Gly	Ile	Lys	Thr	Ile	Leu	Lys	Lys
65					70					75				80	
Ser	Pro	Glu	Pro	Lys	Glu	Asp	Pro	Ala	His	Leu	Ser	Asp	Ser	Ser	Ser
				85					90					95	
Ser	Ser	Gly	Ser	Ile	Val	Ser	Phe	Lys	Ser	Ala	Asp	Ser	Ile	Lys	Ser
			100					105					110		
Arg	Pro	Gly	Ile	Pro	Arg	Leu	Ala	Gly	Asp	Gly	Gly	Glu	Arg	Thr	Ser
		115					120					125			
Pro	Glu	Arg	Arg	Glu	Pro	Gly	Thr	Gly	Arg	Lys	Asp	Asp	Asp	Val	Ala
		130				135					140				
Ser	Ile	Met	Lys	Lys	Tyr	Leu	Gln	Lys							
145					150										

<210> 3197

<211> 5575

<212> DNA

<213> Homo sapiens

<400> 3197

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120
agagcaatgg cgacactgga tcgcaaagtg cccagtcagg aggcgtttct gggcaaacc
180
tggtcctcct ggatcgacgc cgccaaatta cactgctccg acaatgtaga tttagaagag
240
gctggaaaag aggggtggaaa aagcagggag gttatgaggc ttaataaaga agatatgcac
300
ttatttggcc attaccagc acatgacgac ttctatctcg tagtgtgcag tgccgtgaac
360
caggtcgtca agccacaggt tttccagtcg cactgcgaga gaagacacgg ttcaatgtgt
420
agaccttctc cctctccagt gtctccagcc tccaatecca ggacatcact agtacagggtg
480
aaaacaaaag cctgtctcag cggccatcac tctgccagca gcacctcaaa gccattcaaa
540
acgcccagg acaatctact tacctccagc agcaaacagc acacagtctt tctgcgaaa
600
ggatcaaggg ataaaccatg tgttccagtt cctgtagtca gtttagagaa aattcctaac
660
ctagtgaagg cagatgggtgc caatgtcaaa atgaactcca caaccactac tgcagtttct
720
gcctccccc cctcgtctc tgccgtctcc accctcctt taattaagcc tgcctgatg
780
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840
accatagaca agaaacacca aaatggcacc aaaaacagca acaagcctta caggagactt
900
tcagagagag aatttgaccc aaataaacac tgtggagtat tggatcccga gacaaagaaa
960
ccttgacaaa gatccctcac ctgcaagaca cattcgctaa gccatcggag ggcagtccca
1020
ggccggaaaa agcaatttga cctcctcctg gcagaacaca aagcaaagtc ccgggaaaaa
1080
gaagttaaag ataaagagca tctcctgact tccacgaggg aaatacttcc aagccaatcc
1140
gggccggcac aggattctct gctaggggtct tcagggagct ctggggcaga accaaaagtt
1200
gcatccctg caaatccag accacccaac tctgtacttc ctagaccatc atctgcaaat
1260
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1320
ccggttgag gtgacctcgc cagccgactg tccagtgatg aaggggagat ggacggagcc
1380
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<212> PRT

<213> Homo sapiens

<400> 3198

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Ala	His	Asp	Asp	Phe	Tyr	Leu	Val	Val	Cys	Ser	Ala	Cys	Asn	Gln	Val
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Thr	Ser	Leu	Val	Gln	Val	Lys	Thr	Lys	Ala	Cys	Leu	Ser	Gly	His	His
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2411

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 Ala Leu Asn Ser Tyr Gln Ala Ala Pro Pro Tyr Asn Ser Leu Ser Val
 660 665 670
 His Asn Ser Asn Asn Gly Val Ser Pro Leu Ser Ala Lys Leu Glu Pro
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 Ser Gly Arg Thr Ser Leu Pro Gly Gly Pro Ala Asp Ile Val Arg Gln
 690 695 700
 Val Gly Ala Val Gly Gly Ser Ser Asp Ser Cys Pro Leu Ser Val Pro
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 Ser Leu Ala Leu His Ala Gly Asp Leu Ser Leu Ala Ser His Asn Ala
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 Val Ser Ser Leu Pro Leu Ser Phe Asp Lys Ser Glu Gly Lys Lys Arg
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 Lys Asn Ser Ser Ser Ser Ser Lys Ala Cys Lys Ile Thr Lys Met Pro
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 Gly Met Asn Ser Val His Lys Lys Asn Pro Pro Ser Leu Leu Ala Pro
 770 775 780
 Val Pro Asp Pro Val Asn Ser Thr Ser Ser Arg Gln Val Gly Lys Asn
 785 790 795 800
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<210> 3199

<211> 777

<212> DNA

<213> Homo sapiens

<400> 3199

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<210> 3200
<211> 92
<212> PRT
<213> Homo sapiens

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35 40 45
Val Ser Pro Arg Ser Pro Val Pro Ala Val Gly Ala Ala Cys Cys Met
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<210> 3201
<211> 390
<212> DNA
<213> Homo sapiens

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<210> 3202
<211> 116
<212> PRT
<213> Homo sapiens

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Gly Thr Glu Val Ser Ser Cys Thr Gly Ala Arg Ile Pro Asn Thr Ala
      35             40             45
Val Ala Glu Gly Pro Gly Gly Val Gln Val Pro Asn Pro Ser Glu Pro
      50             55             60
Asp Pro Asp Met Gly Pro Val Ser Trp Gly Pro Pro Leu Cys Pro Val
      65             70             75             80
Val Ala Asp Pro Glu Arg Glu Gly Cys Gly Asp Ala His Met Thr Leu
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<210> 3203

<211> 1906

<212> DNA

<213> Homo sapiens

<400> 3203

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<210> 3204

<211> 424

<212> PRT

<213> Homo sapiens

<400> 3204

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His	Arg	Leu	Cys	Gly	Asp	Leu	Val	Ser	Cys	Phe	Gln	Glu	Arg	Ala	Arg
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Ile	Glu	Lys	Ala	Tyr	Ala	Gln	Gln	Leu	Ala	Asp	Trp	Ala	Arg	Lys	Trp
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Arg	Gly	Thr	Val	Glu	Lys	Gly	Pro	Gln	Tyr	Gly	Thr	Leu	Glu	Lys	Ala
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Trp	His	Ala	Phe	Phe	Thr	Ala	Ala	Glu	Arg	Leu	Ser	Ala	Leu	His	Leu
			85					90					95		
Glu	Val	Arg	Glu	Lys	Leu	Gln	Gly	Gln	Asp	Ser	Glu	Arg	Val	Arg	Ala
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Arg Lys Asp Glu Lys Thr Ala Gln Thr Arg Glu Ser His Ala Lys Ala		
165	170	175
Asp Ser Ala Val Ser Gln Glu Gln Leu Arg Lys Leu Gln Glu Arg Val		
180	185	190
Glu Arg Cys Ala Lys Glu Ala Glu Lys Thr Lys Ala Gln Tyr Glu Gln		
195	200	205
Thr Leu Ala Glu Leu His Arg Tyr Thr Pro Arg Tyr Met Glu Asp Met		
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225	230	235
Phe Phe Lys Asp Met Leu Leu Thr Leu His Gln His Leu Asp Leu Ser		
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260	265	270
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<210> 3205

<211> 1482

<212> DNA

<213> Homo sapiens

<400> 3205

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240

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<210> 3206

<211> 494

<212> PRT

<213> Homo sapiens

<400> 3206

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 20 25 30
 Lys Pro His Asn Pro Ala Asp Ile Leu Leu His Pro Thr Gly Glu Pro

35	40	45
Arg Ser Tyr Val Glu Ser Val Ala Arg Thr Ala Val Ala Gly Pro Arg		
50	55	60
Ala Gln Asp Ser Glu Pro Lys Ser Phe Ser Ala Pro Ala Thr Gln Ala		
65	70	75
Tyr Gly His Glu Ile Pro Leu Arg Asn Gly Thr Leu Gly Gly Ser Phe		
85	90	95
Val Ser Pro Ser Pro Leu Ser Thr Ser Ser Pro Ile Leu Ser Ala Asp		
100	105	110
Ser Thr Ser Val Gly Ser Phe Pro Ser Gly Glu Ser Ser Asp Gln Gly		
115	120	125
Pro Arg Thr Pro Thr Gln Pro Leu Leu Glu Ser Gly Phe Arg Ser Gly		
130	135	140
Ser Leu Gly Gln Pro Ser Pro Ser Ala Gln Arg Asn Tyr Gln Ser Ser		
145	150	155
Ser Pro Leu Pro Thr Val Gly Ser Ser Tyr Ser Ser Pro Asp Tyr Ser		
165	170	175
Leu Gln His Phe Ser Ser Ser Pro Glu Ser Gln Ala Arg Ala Gln Phe		
180	185	190
Ser Val Ala Gly Val His Thr Val Pro Gly Ser Pro Gln Ala Arg His		
195	200	205
Arg Thr Val Gly Thr Asn Thr Pro Pro Ser Pro Gly Phe Gly Trp Arg		
210	215	220
Ala Ile Asn Pro Ser Met Ala Ala Pro Ser Ser Pro Ser Leu Ser His		
225	230	235
His Gln Met Met Gly Pro Pro Gly Thr Gly Phe His Gly Ser Thr Val		
245	250	255
Ser Ser Pro Gln Ser Ser Ala Ala Thr Thr Pro Gly Ser Pro Ser Leu		
260	265	270
Cys Arg His Pro Ala Gly Val Tyr Gln Val Ser Gly Leu His Asn Lys		
275	280	285
Val Ala Thr Thr Pro Gly Ser Pro Ser Leu Gly Arg His Pro Gly Ala		
290	295	300
His Gln Gly Asn Leu Ala Ser Gly Leu His Ser Asn Ala Ile Ala Ser		
305	310	315
Pro Gly Ser Pro Ser Leu Gly Arg His Leu Gly Gly Ser Gly Ser Val		
325	330	335
Val Pro Gly Ser Pro Cys Leu Asp Arg His Val Ala Tyr Gly Gly Tyr		
340	345	350
Ser Thr Pro Glu Asp Arg Arg Pro Thr Leu Ser Arg Gln Ser Ser Ala		
355	360	365
Ser Gly Tyr Gln Ala Pro Ser Thr Pro Ser Phe Pro Val Ser Pro Ala		
370	375	380
Tyr Tyr Pro Gly Leu Ser Ser Pro Ala Thr Ser Pro Ser Pro Asp Ser		
385	390	395
Ala Ala Phe Arg Gln Gly Ser Pro Thr Pro Ala Leu Pro Glu Lys Arg		
405	410	415
Arg Met Ser Val Gly Asp Arg Ala Gly Ser Leu Pro Asn Tyr Ala Thr		
420	425	430
Ile Asn Gly Lys Val Ser Ser Pro Val Ala Ser Gly Met Ser Ser Pro		
435	440	445
Ser Gly Gly Ser Thr Val Ser Phe Ser His Thr Leu Pro Asp Phe Ser		
450	455	460
Lys Tyr Ser Met Pro Asp Asn Ser Pro Glu Thr Arg Ala Lys Val Lys		

465 470 475 480
 Phe Val Gln Asp Thr Ser Lys Tyr Trp Tyr Lys Pro Lys Ile
 485 490

<210> 3207
 <211> 495
 <212> DNA
 <213> Homo sapiens

<400> 3207
 ngcgggacgc gcagcgctat ggcagagggc agcggggaag tggtcgcagt gtctgcgacc
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 ggggctgcca acggcctcaa caatggggca ggcgggacct cggcgacgac ctgcaaccgc
 120
 ctgtcgcgca agctgcataa gatcctggag acgcggctgg acaacgacaa ggagatgtta
 180
 gaagctctca aggcactttc aacctttttt gttgaaaata gtctgcggac tcgaagaaat
 240
 ttacgtggag atattgaacg taaaagttaa gccatcaatg aagaatttgt aagcattttc
 300
 aaggaagtga aggaggaact tgaaagcata agcgaagatg ttcaagcaat gagcaactgt
 360
 tgtcaagata tgacaagtcg cctacaggca gcaaaggaac agactcaaga ttaatatgta
 420
 aataccacta agcttcaatc tgaaagccaa aaattagaga taagagctca agttgcagat
 480
 gccttcttat ccaag
 495

<210> 3208
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 3208
 Met Leu Glu Ala Leu Lys Ala Leu Ser Thr Phe Phe Val Glu Asn Ser
 1 5 10 15
 Leu Arg Thr Arg Arg Asn Leu Arg Gly Asp Ile Glu Arg Lys Ser Leu
 20 25 30
 Ala Ile Asn Glu Glu Phe Val Ser Ile Phe Lys Glu Val Lys Glu Glu
 35 40 45
 Leu Glu Ser Ile Ser Glu Asp Val Gln Ala Met Ser Asn Cys Cys Gln
 50 55 60
 Asp Met Thr Ser Arg Leu Gln Ala Ala Lys Glu Gln Thr Gln Asp Leu
 65 70 75 80
 Ile Val Asn Thr Thr Lys Leu Gln Ser Glu Ser Gln Lys Leu Glu Ile
 85 90 95
 Arg Ala Gln Val Ala Asp Ala Phe Leu Ser Lys
 100 105

<210> 3209
 <211> 346
 <212> DNA
 <213> Homo sapiens

<400> 3209

tgttcctcta ggtggggcag gtaggggggc cagcttcctg cttgctgggtg gttcagggtca
 60
 tgcgtccagc cttgtccctt ctgacctggg ccctacccac ggggaaatgt tcccatagca
 120
 gaagaatcag cccacacagt caggggtgtg ttagtgggga acgggctctg ggctcctgtg
 180
 ggaaccaggg accccctate ttggtaccgg tcattggatg tatccccagc tcatgcctgt
 240
 gtctgtcttg gcccggtgtg tcacctgtg ttcactcttc tcccagccat ggctctctaa
 300
 actgggggtt tcgtctccct atgagggggg cctgggtatgt acgcgt
 346

<210> 3210

<211> 95

<212> PRT

<213> Homo sapiens

<400> 3210

Met	Arg	Pro	Ala	Leu	Ser	Leu	Leu	Thr	Trp	Ala	Leu	Pro	Thr	Gly	Lys
1				5				10						15	
Cys	Ser	His	Ser	Arg	Arg	Ile	Ser	Pro	Thr	Val	Gln	Gly	Cys	Val	Ser
			20				25						30		
Gly	Glu	Arg	Ala	Leu	Gly	Ser	Cys	Gly	Asn	Gln	Gly	Pro	Pro	Ile	Leu
		35				40					45				
Val	Pro	Val	Ile	Gly	Cys	Ile	Pro	Ser	Ser	Cys	Leu	Cys	Leu	Ser	Trp
	50				55					60					
Pro	Val	Trp	Ser	Pro	Cys	Val	His	Leu	Ser	Pro	Ser	His	Gly	Leu	Ser
65				70				75						80	
Asn	Trp	Gly	Phe	Arg	Leu	Pro	Met	Arg	Gly	Ser	Trp	Tyr	Val	Arg	
			85					90					95		

<210> 3211

<211> 1728

<212> DNA

<213> Homo sapiens

<400> 3211

tccggaaata taaagttgag ctaccagttt tcagaaatcc atgaagactc taccgtctgc
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 tggacaaaag attccaagtc gatagcccag gccaaagaaa gcgcagggga caactccagt
 120
 gtttccttgg ccatcgtgca agccagtcgg aaggaccagg gactctatta ctgctgcatc
 180
 aagaacagct acggaaaagt gattgctgaa tttaacctca cagctgaagt tctcaaacag
 240
 ctgtcaagtc acacagaata ctaaaggatg tgaagagatt gaattcagcc aactcatctt
 300
 caaagaagac ttctccatg acagctactt tggggggccgc ctgcgtgggc agatcgccac
 360
 ggaggagctg cactttggag aaggggttca ccgcaaagcc ttccgcagca cagtgatgca
 420

cggcctcatg cctgtcttca aacctggcca tgcctgtgtg ctttaaggtgc acaatgccat
 480
 tgcctatggg accagaaata atgatgagct catccaaagg aactacaaac tcgctgcca
 540
 ggaatgctat gttcaaaata ctgccaggta ttatgccaaag atctacgctg ctgaagcaca
 600
 gcctctggaa ggctttggag aagtacctga gatcattcct atttttctta tccatcggcc
 660
 tgagaacaat atcccgtatg ctacagtggg ggaggagctg attggagaat ttgtgaagta
 720
 ttccatcagg gatgggaaag aaataaactt cttgagaaga gaatcagaag ctggtcagaa
 780
 atgttgaccc ttccagcact ggggtgtacca gaaaacaagt ggctgcctcc tgggtgacgga
 840
 catgcaaggt gtaggaatga agctaactga cgttggcata gcaacgctgg ctaaagggtg
 900
 caagggattt aaaggcaact gttccatgac cttcattgat cagtttaaag cactacacca
 960
 gtgtaacaag tattgcaaaa tgctgggact gaaatccctt caaaacaaca accagaaaca
 1020
 gaagcagccg agcattggga aaagcaaagt tcaaacaac tctatgacag taaagaaggc
 1080
 agggcctgag accccaggcg aaaagaaaac ctaacgtccc cgggtaacct aatggccact
 1140
 ggctagcagc acacaatctc gccagggaaa atctgaggcc acacaggaga gaatatacag
 1200
 cctgcagaga gtgcgtggca atccttactc ccagccgact gtgcgccaag atgcttctaa
 1260
 acccatcacc tgctgtcttc actcaaatga tttcagaaca ggatttgcca ccaggtttat
 1320
 ggggagattg aatcaacgat tggctctcaa gacagtccat tctttatata catgttttagc
 1380
 atttttacca acctcacatc atgtgtatat ttgtgtattt gcacatgggt gtgctgtcga
 1440
 ggacctggtg ctgagaagag tctgttcaca gccaaaattc tteccactgt cattcctaac
 1500
 ctgggatttc tagacacatc ctgctgtgat gtaaacagaa atcacgaatt cgctcactgg
 1560
 atcaagttgt tccactggtg tctaatacgc tattgttgcc ggagggtgggt tctgtgacgt
 1620
 gaagccattt cccatcattc aacagccagt tacaattttc tgtttaatta aattcatatt
 1680
 taaacaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa
 1728

<210> 3212

<211> 87

<212> PRT

<213> Homo sapiens

<400> 3212

Ser	Gly	Asn	Ile	Lys	Leu	Ser	Tyr	Gln	Phe	Ser	Glu	Ile	His	Glu	Asp
1				5				10						15	
Ser	Thr	Val	Cys	Trp	Thr	Lys	Asp	Ser	Lys	Ser	Ile	Ala	Gln	Ala	Lys

```

      20      25      30
Lys Ser Ala Gly Asp Asn Ser Ser Val Ser Leu Ala Ile Val Gln Ala
      35      40      45
Ser Pro Lys Asp Gln Gly Leu Tyr Tyr Cys Cys Ile Lys Asn Ser Tyr
      50      55      60
Gly Lys Val Thr Ala Glu Phe Asn Leu Thr Ala Glu Val Leu Lys Gln
      65      70      75      80
Leu Ser Ser His Thr Glu Tyr
      85

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<210> 3213
 <211> 348
 <212> DNA
 <213> Homo sapiens

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<400> 3213
acgcgtgaag gggaagcggc ggggtagtaa cagattatgg gcaacagtcc ttttaattaa
60
tctaccgtca tcatggctaa tgaggactgt cccaaggctg ctgatagtcc tttttcatca
120
gataaacatg cccaactcat cttggcccaa atcaataaga tgagaaatgg acagcatttc
180
tgtgatgtgc agctgcaagt tggacaggaa agttttaaaag ctcacgggct ggttttggct
240
gccagcagtc cttactttgc agctttgttc actggaggaa tgaaagagtc ctcaaaagat
300
gttgtagcga ttctaggaat tgaagcagga atctttcaga tactttcta
348

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<210> 3214
 <211> 92
 <212> PRT
 <213> Homo sapiens

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<400> 3214
Met Ala Asn Glu Asp Cys Pro Lys Ala Ala Asp Ser Pro Phe Ser Ser
1      5      10      15
Asp Lys His Ala Gln Leu Ile Leu Ala Gln Ile Asn Lys Met Arg Asn
      20      25      30
Gly Gln His Phe Cys Asp Val Gln Leu Gln Val Gly Gln Glu Ser Phe
      35      40      45
Lys Ala His Arg Leu Val Leu Ala Ala Ser Ser Pro Tyr Phe Ala Ala
      50      55      60
Leu Phe Thr Gly Gly Met Lys Glu Ser Ser Lys Asp Val Val Pro Ile
      65      70      75      80
Leu Gly Ile Glu Ala Gly Ile Phe Gln Ile Leu Leu
      85      90

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<210> 3215
 <211> 597
 <212> DNA
 <213> Homo sapiens

<400> 3215

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 60
 tgcaacactg gggacaagat ggtggagtgc cagctggaga cgcacaacca caagatgggtg
 120
 accttcaagt tcgacttgga cggggacgca cccgatgaaa ttgccacgta tatgggtggag
 180
 catgacttta tcctgcaggc cgagcgggaa acgttcacgc agcagatgaa ggatgtcatg
 240
 gacaaggcag aggacatgct cagcaggagc acagacgccg accgtggctc cgacccaggg
 300
 accagccccg cacacctcag cacctgcggc ctgggcaccg gggaggagag ccgacaatcc
 360
 caagccaacg cccccgtgta tcagcagaac gtccctgcaca ccgggaagag gtggttcatc
 420
 atctgtccgg tgcctgagcc ccccgcccc gagggccctt gaatcttcgc cccacttcc
 480
 tctaagctcc ctgccgccag aagccagcca agattcagcg ccctataaag accagctgtc
 540
 ctcgaaggaa caaccagct ttctagccag tcagcagctc ctgggccagg cgggccc
 597

<210> 3216
 <211> 153
 <212> PRT
 <213> Homo sapiens

<400> 3216
 Thr Arg Ala Arg Ser Arg Gln Glu Arg Ala Ser Arg Pro Arg Leu Thr
 1 5 10 15
 Ile Leu Asn Val Cys Asn Thr Gly Asp Lys Met Val Glu Cys Gln Leu
 20 25 30
 Glu Thr His Asn His Lys Met Val Thr Phe Lys Phe Asp Leu Asp Gly
 35 40 45
 Asp Ala Pro Asp Glu Ile Ala Thr Tyr Met Val Glu His Asp Phe Ile
 50 55 60
 Leu Gln Ala Glu Arg Glu Thr Phe Ile Glu Gln Met Lys Asp Val Met
 65 70 75 80
 Asp Lys Ala Glu Asp Met Leu Ser Glu Asp Thr Asp Ala Asp Arg Gly
 85 90 95
 Ser Asp Pro Gly Thr Ser Pro Pro His Leu Ser Thr Cys Gly Leu Gly
 100 105 110
 Thr Gly Glu Glu Ser Arg Gln Ser Gln Ala Asn Ala Pro Val Tyr Gln
 115 120 125
 Gln Asn Val Leu His Thr Gly Lys Arg Trp Phe Ile Ile Cys Pro Val
 130 135 140
 Pro Glu Pro Pro Ala Pro Glu Gly Pro
 145 150

<210> 3217
 <211> 2570
 <212> DNA
 <213> Homo sapiens

<400> 3217

gggggtcaaag ctgcccagta cccttggggt gttgtacaag tggaaaatga aaaccactgt
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gactttgtaa agctgcggga aatgctcatt tgtacaaata tggaggacct gcgagagcag
120
acccatacca ggcactatga gctttacagg cgctgcaaac tggaggaaat gggctttaca
180
gatgtgggccc cagaaaacaa gccagtcagt gttcaagaga cctatgaagc caaaagacat
240
gagttccatg gtgaacgtca gaggaaggaa gaagaaatga aacagatgtt tgtgcagcga
300
gtaaaggaga aagaagccat attgaaagaa gctgagagag agctacaggc caaatttgag
360
caccttaaga gacttcacca agaagagaga atgaagcttg aagaacaaag aagacttttg
420
gaagaagaaa taattgcttt ctctaaaaag aaagctacct ccgagatatt tcacagccag
480
tcctttcttg caacaggcag caacctgagt aaggacaagg accataagaa ctccaatttt
540
ttgtaaaaca gaagttccag agcacagaag gtcacatca caagcaaact ttattaaaaa
600
aaaactagaa gtgtgctttg attttgctgt tatttgtttt atcacttcta tatttggtga
660
acagccacag ttactgatat ttatggaaaa gtactttcaa gtacaaggtc aatacataag
720
ccagagtga tgaactaca agttgagcat ctctaattca aaaatctgaa atccagaagc
780
ttcaaaatct gaatcttttt gagcactgac ttgacccac aagtggaaaa tccccaccc
840
gacacctttg ctttctgatg gttcagttta aacagatttt gtttcttgca caaaattttt
900
gtataaatta ctttcaggct atatgtataa ggtggatgtg aaacatgaat tatgtaatta
960
gagtcgggtc ccgttggtga tatgcagata ttccaaacct gaaatccaaa acacttctgg
1020
tccttagcat tttggataag ggatactcag cttgtacct tatattcata tatattcact
1080
gttggttagaa atgtttaagt tgctgttctg tgatgaatct aaatcttttc tcttgctacc
1140
aagctattgt cactgcagtg cattatacca aagagcgaag tcagtgccac tgaaaataca
1200
gaaccatta atatcgtggc tatctgatta catttatatt ccaagatgaa ctttttttta
1260
tatatgctaa aaattttggg gaatatgttt tgggatgtat tatggagcta aaactctaac
1320
ctcttaatag ttttatagaa cttaaaaatt ttttatacaa ttaccaatt ggtgatatga
1380
tcttaagctt ttgtgtcaga ttatttaata tgatgacttc atgctttatt atgccttatt
1440
atggctgacg tattactgtg gtgaaacaaa atatctttta aagttaaaac atccagatat
1500
ataagctatt ttttcctaag gataaagtac ctttgagcat gagtgtatca cagctttcat
1560
taggaaaact tttcattaca tacttgttta aactctgtct tccagggtaa aaataataag
1620

gttgaatcat tttattaaaa atacttttta agaaaataac tatgaacatc tgaatattaa
 1680
 agatataaaa atgcacataa ttcataatttc aggtggtatt tgcattcagt gccttactgg
 1740
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 1800
 tcattttttg tacttgaata ttctaaataa aactgacatt tactcttgac aaataaaaca
 1860
 tatatttact aaaaaaaaaa aaaaaaaacc tcgtgccgaa ttcggagagt ctaggaatac
 1920
 tgttaaagga aaaaaaagag gggggaagat caggtcatac tatctactct cctcatctct
 1980
 aacagctcag gatctcttag cattttaatt agatgtaatt gtttgtcttt aactgtcaaa
 2040
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 2100
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 2160
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 2220
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 2280
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 2340
 tgagtcaggt ttgagtagag gcttagagac agttgggtga gaacaaccaa aatcttatca
 2400
 tgggtctcagt cataatcatt agggggaact ctagccaaat ggtttaactt ctgcctgtgg
 2460
 aactggggat tgggtgggca ggaaaagggtg atatccattc tttctgataa ctagatgggtg
 2520
 ctgagaagct tttgaataaa aactttgcta aatgaaaaaa aaaaaaaaaa
 2570

<210> 3218
 <211> 181
 <212> PRT
 <213> Homo sapiens

<400> 3218
 Gly Val Lys Ala Arg Gln Tyr Pro Trp Gly Val Val Gln Val Glu Asn
 1 5 10 15
 Glu Asn His Cys Asp Phe Val Lys Leu Arg Glu Met Leu Ile Cys Thr
 20 25 30
 Asn Met Glu Asp Leu Arg Glu Gln Thr His Thr Arg His Tyr Glu Leu
 35 40 45
 Tyr Arg Arg Cys Lys Leu Glu Glu Met Gly Phe Thr Asp Val Gly Pro
 50 55 60
 Glu Asn Lys Pro Val Ser Val Gln Glu Thr Tyr Glu Ala Lys Arg His
 65 70 75 80
 Glu Phe His Gly Glu Arg Gln Arg Lys Glu Glu Glu Met Lys Gln Met
 85 90 95
 Phe Val Gln Arg Val Lys Glu Lys Glu Ala Ile Leu Lys Glu Ala Glu
 100 105 110
 Arg Glu Leu Gln Ala Lys Phe Glu His Leu Lys Arg Leu His Gln Glu

	115		120		125	
Glu	Arg	Met	Lys	Leu	Glu	Glu
	130		135		140	
Ile	Ala	Phe	Ser	Lys	Lys	Lys
145			150		155	160
Ser	Phe	Leu	Ala	Thr	Gly	Ser
	165		170		175	
Asn	Ser	Asn	Phe	Leu		
	180					

<210> 3219

<211> 1241

<212> DNA

<213> Homo sapiens

<400> 3219

gcgcgccatg taccacaccc agcacctcag gtcccgccca gcagggggct cggctgtgcc
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tcctctggac gccacgttgt cccagcccag gttcatgtca atgggtggng cgttacatct
120
gagcgggaga cagacatcct ggacgatgaa ttgccaaacc aggatgggtca cagtgcgggc
180
agcatgggca cactctcttc tctggacggg gtcaccaaca tcagtgaggg gggctacca
240
gaggeccctgt cccactgac caacgggtctg gacaagtcct accccatgga gcctatggtc
300
aatggaggag gctaccccta cgagtctgcc agccggggcg ggccctgcca tgctggccac
360
acggccccca tgcggccctc ctactctgca caggaggggt tagctggcta ccagagggag
420
gggccccacc cagcctggcc acagccagtg accacctccc actatgcca tgacccagc
480
ggtatgttcc gctctcaatc cttttcggaa gctgaacccc agctgcccc agctccggtc
540
cgagggggaa gcagccggga ggctgtgcaa aggggactga attcgtggca gcagcagcag
600
cagcagcagc agcagcctcg cccacctcca cgccagcagg aaagagccca cttggagagt
660
ctttagcca gcaggcccag cctcagcca ttggcagaga ccccatccc cagtctcct
720
gagttcccgc gagcagcctc ccagcaggag attgaacagt ccatcgaaac actcaatatg
780
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840
ccgggggcct ggccaggggc ttctccactc tctcccagc cctctcttg atcctccgt
900
cagtcctcct cactgacca gtccagatct ggctatatcc ccagtgggca ttcgttgga
960
accctgagc cagccccacg ggcctctctg gagtctgtcc ctctggcag gtcttactca
1020
ccttatgact atcagccatg ttggtggg cctaaccagg atttccattc aaagagccca
1080
gcctcttctt ccttgctgc ctctctccg accaccaca gcctccagg gcctcagcaa
1140

ccccagcct ctctccctgg cctcactgct cagcctctgc tctcaccaaa ggaagcgact
 1200
 tcagaccct cccggactcc agaggaggag ccattgaatt c
 1241

<210> 3220
 <211> 413
 <212> PRT
 <213> Homo sapiens

<400> 3220
 Ala Arg His Val Pro His Pro Ala Pro Gln Val Pro Pro Ser Arg Gly
 1 5 10 15
 Leu Gly Cys Ala Ser Ser Gly Arg His Val Val Pro Ala Gln Val His
 20 25 30
 Val Asn Gly Gly Xaa Val Thr Ser Glu Arg Glu Thr Asp Ile Leu Asp
 35 40 45
 Asp Glu Leu Pro Asn Gln Asp Gly His Ser Ala Gly Ser Met Gly Thr
 50 55 60
 Leu Ser Ser Leu Asp Gly Val Thr Asn Ile Ser Glu Gly Gly Tyr Pro
 65 70 75 80
 Glu Ala Leu Ser Pro Leu Thr Asn Gly Leu Asp Lys Ser Tyr Pro Met
 85 90 95
 Glu Pro Met Val Asn Gly Gly Gly Tyr Pro Tyr Glu Ser Ala Ser Arg
 100 105 110
 Ala Gly Pro Ala His Ala Gly His Thr Ala Pro Met Arg Pro Ser Tyr
 115 120 125
 Ser Ala Gln Glu Gly Leu Ala Gly Tyr Gln Arg Glu Gly Pro His Pro
 130 135 140
 Ala Trp Pro Gln Pro Val Thr Thr Ser His Tyr Ala His Asp Pro Ser
 145 150 155 160
 Gly Met Phe Arg Ser Gln Ser Phe Ser Glu Ala Glu Pro Gln Leu Pro
 165 170 175
 Pro Ala Pro Val Arg Gly Gly Ser Ser Arg Glu Ala Val Gln Arg Gly
 180 185 190
 Leu Asn Ser Trp Gln Gln Gln Gln Gln Gln Gln Gln Gln Pro Arg Pro
 195 200 205
 Pro Pro Arg Gln Gln Glu Arg Ala His Leu Glu Ser Leu Val Ala Ser
 210 215 220
 Arg Pro Ser Pro Gln Pro Leu Ala Glu Thr Pro Ile Pro Ser Leu Pro
 225 230 235 240
 Glu Phe Pro Arg Ala Ala Ser Gln Gln Glu Ile Glu Gln Ser Ile Glu
 245 250 255
 Thr Leu Asn Met Leu Met Leu Asp Leu Glu Pro Ala Ser Ala Ala Ala
 260 265 270
 Pro Leu His Lys Ser Gln Ser Val Pro Gly Ala Trp Pro Gly Ala Ser
 275 280 285
 Pro Leu Ser Ser Gln Pro Leu Ser Gly Ser Ser Arg Gln Ser His Pro
 290 295 300
 Leu Thr Gln Ser Arg Ser Gly Tyr Ile Pro Ser Gly His Ser Leu Gly
 305 310 315 320
 Thr Pro Glu Pro Ala Pro Arg Ala Ser Leu Glu Ser Val Pro Pro Gly
 325 330 335
 Arg Ser Tyr Ser Pro Tyr Asp Tyr Gln Pro Cys Leu Ala Gly Pro Asn

	340		345		350										
Gln	Asp	Phe	His	Ser	Lys	Ser	Pro	Ala	Ser	Ser	Ser	Leu	Pro	Ala	Phe
	355						360					365			
Leu	Pro	Thr	Thr	His	Ser	Pro	Pro	Gly	Pro	Gln	Gln	Pro	Pro	Ala	Ser
	370						375					380			
Leu	Pro	Gly	Leu	Thr	Ala	Gln	Pro	Leu	Leu	Ser	Pro	Lys	Glu	Ala	Thr
385					390					395					400
Ser	Asp	Pro	Ser	Arg	Thr	Pro	Glu	Glu	Glu	Pro	Leu	Asn			
			405					410							

<210> 3221

<211> 1585

<212> DNA

<213> Homo sapiens

<400> 3221

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1140

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<210> 3222
 <211> 331
 <212> PRT
 <213> Homo sapiens

<400> 3222
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 35 40 45
 His Leu Arg Ala Asn Gly Tyr Leu Cys Lys Tyr Gln Phe Glu Val Leu
 50 55 60
 Cys Pro Ala Pro Arg Pro Gly Ala Ala Ser Asn Leu Ser Tyr Arg Ala
 65 70 75 80
 Pro Phe Gln Leu His Ser Ala Ala Leu Asp Phe Ser Pro Pro Gly Thr
 85 90 95
 Glu Val Ser Ala Leu Cys Arg Gly Gln Leu Pro Ile Ser Val Thr Cys
 100 105 110
 Ile Ala Asp Glu Ile Gly Ala Arg Trp Asp Lys Leu Ser Gly Asp Val
 115 120 125
 Leu Cys Pro Cys Pro Gly Arg Tyr Leu Arg Ala Gly Lys Cys Ala Glu
 130 135 140
 Leu Pro Asn Cys Leu Asp Asp Leu Gly Gly Phe Ala Cys Glu Cys Ala
 145 150 155 160
 Thr Gly Phe Glu Leu Gly Lys Asp Gly Arg Ser Cys Val Thr Ser Gly
 165 170 175
 Glu Gly Gln Pro Thr Leu Gly Gly Thr Gly Val Pro Thr Arg Arg Pro
 180 185 190
 Pro Ala Thr Ala Thr Ser Pro Val Pro Gln Arg Thr Trp Pro Ile Arg
 195 200 205
 Val Asp Glu Lys Leu Gly Glu Thr Pro Leu Val Pro Glu Gln Asp Asn
 210 215 220
 Ser Val Thr Ser Ile Pro Glu Ile Pro Arg Trp Gly Ser Gln Ser Thr
 225 230 235 240
 Met Ser Thr Leu Gln Met Ser Leu Gln Ala Glu Ser Lys Ala Thr Ile

				245					250					255				
Thr	Pro	Ser	Gly	Ser	Val	Ile	Ser	Lys	Phe	Asn	Ser	Thr	Thr	Ser	Ser			
			260					265					270					
Ala	Thr	Pro	Gln	Ala	Phe	Asp	Ser	Ser	Ser	Ala	Val	Val	Phe	Ile	Phe			
		275					280					285						
Val	Ser	Thr	Ala	Val	Val	Val	Leu	Val	Ile	Leu	Thr	Met	Thr	Val	Leu			
	290					295					300							
Gly	Leu	Val	Lys	Leu	Cys	Phe	His	Glu	Ser	Pro	Ser	Ser	Gln	Pro	Arg			
305					310					315					320			
Lys	Glu	Ser	Met	Gly	Pro	Pro	Gly	Cys	Asp	Glu								
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<210> 3223

<211> 985

<212> DNA

<213> Homo sapiens

<400> 3223

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120
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240
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360
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420
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480
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540
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720
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780
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960
aaagcccatg gattttgggc ctgta
985

```

<210> 3224

<211> 224
 <212> PRT
 <213> Homo sapiens

<400> 3224
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 Ser Asn Pro Asp Ser Leu Ile Phe Gly Ala Leu Thr Ile Met Thr Gly
 20 25 30
 Val Ile Gly Val Ile Leu Gly Ala Glu Ala Ser Arg Arg Tyr Lys Lys
 35 40 45
 Val Ile Pro Gly Ala Glu Pro Leu Ile Cys Ala Ser Ser Leu Leu Ala
 50 55 60
 Thr Ala Pro Cys Leu Tyr Leu Ala Leu Val Leu Ala Pro Thr Thr Leu
 65 70 75 80
 Leu Ala Ser Tyr Val Phe Leu Gly Leu Gly Glu Leu Leu Leu Ser Cys
 85 90 95
 Asn Trp Ala Val Val Ala Asp Ile Leu Leu Ser Val Val Val Pro Arg
 100 105 110
 Cys Arg Gly Thr Ala Glu Ala Leu Gln Ile Thr Val Gly His Ile Leu
 115 120 125
 Gly Asp Ala Gly Ser Pro Tyr Leu Thr Gly Leu Ile Ser Ser Val Leu
 130 135 140
 Arg Pro Gly Ala Leu Thr Pro Leu Gln Arg Phe Arg Ser Leu Gln Gln
 145 150 155 160
 Ser Phe Leu Cys Cys Ala Phe Val Ile Ala Leu Gly Gly Gly Cys Phe
 165 170 175
 Leu Leu Thr Ala Leu Tyr Leu Glu Arg Asp Glu Thr Arg Ala Trp Gln
 180 185 190
 Pro Val Thr Gly Thr Pro Asp Ser Asn Asp Val Asp Ser Asn Asp Leu
 195 200 205
 Glu Arg Gln Gly Leu Leu Ser Gly Ala Gly Ala Ser Thr Glu Glu Pro
 210 215 220

<210> 3225
 <211> 506
 <212> DNA
 <213> Homo sapiens

<400> 3225
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 120
 agaggaacat tttaaattggc ctacgtccat gcaccttctt tattcaagaa gctaccaaga
 180
 attctgcttg tttcccagtc cctaaaatgc ctgtgccatg tgccctgggt gaagaactag
 240
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 300
 aagtgggaacc acagcctcaa cccacacaga ggatggaacc accttctgca gctaaaaata
 360
 accacaccgc ctttgaggtg agccacccaa gatgcaggtg gggctgtatg aaactccacg
 420

aacatgggat gagtttcatt ttcaggggttc cgagggggcca tgagtgggtac caagatccct
480
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506

<210> 3226
<211> 137
<212> PRT
<213> Homo sapiens

<400> 3226
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Leu Arg Pro Cys Thr Phe Phe Ile Gln Glu Ala Thr Lys Asn Ser Ala
20 25 30
Cys Phe Pro Val Pro Lys Met Pro Val Pro Cys Ala Leu Gly Glu Glu
35 40 45
Leu Val Pro Cys His Arg Gly Thr Gly Pro Ala Val Val Trp Pro Ala
50 55 60
Gln Pro Gln Gln Gly Glu Val Glu Pro Gln Pro Gln Pro Thr Gln Arg
65 70 75 80
Met Glu Pro Pro Ser Ala Ala Lys Asn Asn His Thr Ala Phe Glu Val
85 90 95
Ser His Pro Arg Cys Arg Trp Gly Cys Met Lys Leu His Glu His Gly
100 105 110
Met Ser Phe Ile Phe Arg Val Pro Arg Gly His Glu Trp Tyr Gln Asp
115 120 125
Pro Trp Arg Cys Pro Trp Phe Pro Met
130 135

<210> 3227
<211> 1623
<212> DNA
<213> Homo sapiens

<400> 3227
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120
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180
gcattcccat cccctctccc ggggcggagg tgaggacctc cttggttctt ttggttctgt
240
cagtgaagccc ctctcttggc catgaagctc gtgaggaaga acatcgagaa ggacaatgcg
300
ggccaggtga ccctgggtccc cgaggagcct gaggacatgt ggcacactta caacctcgtg
360
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420
ggcagcgtgg gcagcaaccg ggtccgcact accctcactc tctgcgtgga ggccatcgac
480
ttcgactctc aagcctgcca gctgcggggt aaggggacca acatccaaga gaatgagtat
540

gtcaagatgg gggcttacca caccatcgag ctggagccca accgccagtt caccctggcc
 600
 aagaagcagt gggatagtgt ggtactggag cgcacgcagc aggcctgtga cccagcctgg
 660
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 720
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 780
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 840
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 960
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 1020
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 1620
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 1623

<210> 3228

<211> 385

<212> PRT

<213> Homo sapiens

<400> 3228

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			20					25					30		
Val	Gln	Val	Gly	Asp	Ser	Leu	Arg	Ala	Ser	Thr	Ile	Arg	Lys	Val	Gln
		35					40					45			
Thr	Glu	Ser	Ser	Thr	Gly	Ser	Val	Gly	Ser	Asn	Arg	Val	Arg	Thr	Thr
	50					55					60				
Leu	Thr	Leu	Cys	Val	Glu	Ala	Ile	Asp	Phe	Asp	Ser	Gln	Ala	Cys	Gln

65 70 75 80
 Leu Arg Val Lys Gly Thr Asn Ile Gln Glu Asn Glu Tyr Val Lys Met
 85 90 95
 Gly Ala Tyr His Thr Ile Glu Leu Glu Pro Asn Arg Gln Phe Thr Leu
 100 105 110
 Ala Lys Lys Gln Trp Asp Ser Val Val Leu Glu Arg Ile Glu Gln Ala
 115 120 125
 Cys Asp Pro Ala Trp Ser Ala Asp Val Ala Ala Val Val Met Gln Glu
 130 135 140
 Gly Leu Ala His Ile Cys Leu Val Thr Pro Ser Met Thr Leu Thr Arg
 145 150 155 160
 Ala Lys Val Glu Val Asn Ile Pro Arg Lys Arg Lys Gly Asn Cys Ser
 165 170 175
 Gln His Asp Arg Ala Leu Glu Arg Phe Tyr Glu Gln Val Val Gln Ala
 180 185 190
 Ile Gln Arg His Ile His Phe Asp Val Val Lys Cys Ile Leu Val Ala
 195 200 205
 Ser Pro Gly Phe Val Arg Glu Gln Phe Cys Asp Tyr Met Phe Gln Gln
 210 215 220
 Ala Val Lys Thr Asp Asn Lys Leu Leu Leu Glu Asn Arg Ser Lys Phe
 225 230 235 240
 Leu Gln Val His Ala Ser Ser Gly His Lys Tyr Ser Leu Lys Glu Ala
 245 250 255
 Leu Cys Asp Pro Thr Val Ala Ser Arg Leu Ser Asp Thr Lys Ala Ala
 260 265 270
 Gly Glu Val Lys Ala Leu Asp Asp Phe Tyr Lys Met Leu Gln His Glu
 275 280 285
 Pro Asp Arg Ala Phe Tyr Gly Leu Lys Gln Val Glu Lys Ala Asn Glu
 290 295 300
 Ala Met Ala Ile Asp Thr Leu Leu Ile Ser Asp Glu Leu Phe Arg His
 305 310 315 320
 Gln Asp Val Ala Thr Arg Ser Arg Tyr Val Arg Leu Val Asp Ser Val
 325 330 335
 Lys Glu Asn Ala Gly Thr Val Arg Ile Phe Ser Ser Leu His Val Ser
 340 345 350
 Gly Glu Gln Leu Ser Gln Leu Thr Gly Val Ala Ala Ile Leu Arg Phe
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 Pro Val Pro Glu Leu Ser Asp Gln Glu Gly Asp Ser Ser Ser Glu Glu
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 Asp
 385

<210> 3229

<211> 1008

<212> DNA

<213> Homo sapiens

<400> 3229

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180

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<210> 3230

<211> 232

<212> PRT

<213> Homo sapiens

<400> 3230

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Cys	Ser	Asp	Gly	Phe	Ala	Phe	Pro	Gln	Tyr	Pro	Ile	Lys	Pro	Tyr	His
			20					25					30		
Leu	Lys	Arg	Ile	His	Arg	Ala	Val	Leu	Arg	Gly	Asn	Leu	Glu	Glu	Leu
			35				40					45			
Lys	Tyr	Leu	Leu	Leu	Thr	Tyr	Tyr	Asp	Ile	Asn	Lys	Arg	Asp	Arg	Lys
	50					55				60					
Glu	Arg	Thr	Ala	Leu	His	Leu	Ala	Cys	Ala	Thr	Gly	Gln	Pro	Glu	Met
65					70					75				80	
Val	His	Leu	Leu	Val	Ser	Arg	Arg	Cys	Glu	Leu	Asn	Leu	Cys	Asp	Arg
				85				90					95		
Glu	Asp	Arg	Thr	Pro	Leu	Ile	Lys	Ala	Val	Gln	Leu	Arg	Gln	Glu	Ala
			100					105					110		
Cys	Ala	Thr	Leu	Leu	Leu	Gln	Asn	Gly	Ala	Asp	Pro	Asn	Ile	Thr	Asp
		115				120						125			
Val	Phe	Gly	Arg	Thr	Ala	Leu	His	Tyr	Ala	Val	Tyr	Asn	Glu	Asp	Thr
	130					135					140				
Ser	Met	Ile	Glu	Lys	Leu	Leu	Ser	His	Gly	Thr	Asn	Ile	Glu	Glu	Cys

145		150		155		160									
Ser	Lys	Asn	Glu	Tyr	Gln	Pro	Leu	Leu	Leu	Ala	Val	Ser	Arg	Arg	Lys
			165					170						175	
Val	Lys	Met	Val	Glu	Phe	Leu	Leu	Lys	Lys	Lys	Ala	Asn	Val	Asn	Ala
		180						185					190		
Ile	Asp	Tyr	Leu	Gly	Arg	Ser	Ala	Leu	Ile	Leu	Ala	Val	Thr	Leu	Gly
	195					200					205				
Glu	Lys	Asp	Ile	Val	Ile	Leu	Leu	Leu	Gln	His	Asn	Ile	Asp	Val	Phe
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<210> 3231

<211> 1367

<212> DNA

<213> Homo sapiens

<400> 3231

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180
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240
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1080

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tcagtagcag acaaagtttc ttaaattcccg aagaaaaata taagtgttcc acaagtttca
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 1367

<210> 3232

<211> 251

<212> PRT

<213> Homo sapiens

<400> 3232

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Tyr	Trp	Phe	Ala	Ala	Thr	Val	Ala	Val	Pro	Leu	Val	Gly	Lys	Leu	Gly	30
			20					25								
Leu	Ile	Ser	Pro	Ala	Tyr	Leu	Phe	Leu	Trp	Pro	Glu	Ala	Phe	Leu	Tyr	45
			35				40									
Arg	Phe	Gln	Ile	Trp	Arg	Pro	Ile	Thr	Ala	Thr	Phe	Tyr	Phe	Pro	Val	60
			50			55										
Gly	Pro	Gly	Thr	Gly	Phe	Leu	Tyr	Leu	Val	Asn	Leu	Tyr	Phe	Leu	Tyr	80
65					70				75							
Gln	Tyr	Ser	Thr	Arg	Leu	Glu	Thr	Gly	Ala	Phe	Asp	Gly	Arg	Pro	Ala	95
			85					90								
Asp	Tyr	Leu	Phe	Met	Leu	Leu	Phe	Asn	Trp	Ile	Cys	Ile	Val	Ile	Thr	110
			100					105								
Gly	Leu	Ala	Met	Asp	Met	Gln	Leu	Leu	Met	Ile	Pro	Leu	Ile	Met	Ser	125
			115				120									
Val	Leu	Tyr	Val	Trp	Ala	Gln	Leu	Asn	Arg	Asp	Met	Ile	Val	Ser	Phe	140
			130			135										
Trp	Phe	Gly	Thr	Arg	Phe	Lys	Ala	Cys	Tyr	Leu	Pro	Trp	Val	Ile	Leu	160
145					150					155						
Gly	Phe	Asn	Tyr	Ile	Ile	Gly	Gly	Ser	Val	Ile	Asn	Glu	Leu	Ile	Gly	175
			165					170								
Asn	Leu	Val	Gly	His	Leu	Tyr	Phe	Phe	Leu	Met	Phe	Arg	Tyr	Pro	Met	190
			180					185								
Asp	Leu	Gly	Gly	Arg	Asn	Phe	Leu	Ser	Thr	Pro	Gln	Phe	Leu	Tyr	Arg	205
			195				200									
Trp	Leu	Pro	Ser	Arg	Arg	Gly	Gly	Val	Ser	Gly	Phe	Gly	Val	Pro	Pro	220
			210			215										
Ala	Ser	Met	Arg	Arg	Ala	Ala	Asp	Gln	Asn	Gly	Gly	Gly	Gly	Arg	His	240
225					230				235							
Asn	Trp	Gly	Gln	Gly	Phe	Arg	Leu	Gly	Asp	Gln						
			245						250							

<210> 3233

<211> 975

<212> DNA

<213> Homo sapiens

<400> 3233

nacgcgtacg tggtaggagct ctgcgtgttt actatcttttg gaaatgaaga aaatggaaag
 60
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 120
 atgacaattt tcacatctcc cgttccccc tccaaagagt tctactgtc caattctgaa
 180
 aaggaacgtt atgaaaaaga attcagccaa gaaagacaac aagaaatttt gagaagagca
 240
 gcaagagctt tacctatcta taccacatca gcttcaaaaa ctatcagata ttgtgaaaaa
 300
 tgtcagctga ttaaacctga tcgggcgcac cactgctcag cctgtgactc atgtattctt
 360
 aagatggatc atccctgtcc ttgggtgaat aactgtgtgg gatcttctaa ttacaaattc
 420
 ttctgtgtg ttttattgta ttccctatta tattgccttt tcgtggccgc acagttttag
 480
 agtacttaaa aaattttgga cgaaagaacc gacaaaacc cgggccaaaa ttccacgtac
 540
 tttttcttt tctttgtgtc tgcaatgttc ttcacagcg tcctctcact ttccagctac
 600
 cactgctggc tttaaacagc attgtccaca gctccgtctg cagggtcagg gcatggcctc
 660
 tctccgtgtt cctgtgaaga gccttcattg gaatcatccc gggacataca gcttgaatgt
 720
 gctgtctggc tagccctcc acaagtcggt cactctgcac aaggaatccg agagctcatc
 780
 aaggatcagc acggtctggg gccaggtgg ggtggaacac gcacgggtcca caagcaattc
 840
 tgtctttctc aaggcttttt cttgtgcagt atgaaatcct tcatatttca tatgaagtat
 900
 gtgccttctg gggcactgag ctcaggaact ccaaaaagac cccttcgggc cggatcccgg
 960
 cttcaaggct gcccc
 975

<210> 3234

<211> 159

<212> PRT

<213> Homo sapiens

<400> 3234

Xaa Ala Tyr Val Val Glu Leu Cys Val Phe Thr Ile Phe Gly Asn Glu
 1 5 10 15
 Glu Asn Gly Lys Thr Val Val Tyr Leu Val Ala Phe His Leu Phe Phe
 20 25 30
 Val Met Phe Val Trp Ser Tyr Trp Met Thr Ile Phe Thr Ser Pro Ala
 35 40 45
 Ser Pro Ser Lys Glu Phe Tyr Leu Ser Asn Ser Glu Lys Glu Arg Tyr
 50 55 60
 Glu Lys Glu Phe Ser Gln Glu Arg Gln Gln Glu Ile Leu Arg Arg Ala
 65 70 75 80
 Ala Arg Ala Leu Pro Ile Tyr Thr Thr Ser Ala Ser Lys Thr Ile Arg

			85					90					95				
Tyr	Cys	Glu	Lys	Cys	Gln	Leu	Ile	Lys	Pro	Asp	Arg	Ala	His	His	Cys		
			100					105					110				
Ser	Ala	Cys	Asp	Ser	Cys	Ile	Leu	Lys	Met	Asp	His	Pro	Cys	Pro	Trp		
		115					120					125					
Val	Asn	Asn	Cys	Val	Gly	Phe	Ser	Asn	Tyr	Lys	Phe	Phe	Leu	Leu	Phe		
	130					135					140						
Leu	Leu	Tyr	Ser	Leu	Leu	Tyr	Cys	Leu	Phe	Val	Ala	Ala	Gln	Phe			
145					150					155							

<210> 3235

<211> 551

<212> DNA

<213> Homo sapiens

<400> 3235

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ntggaaactg agcttcaaac atataagcat tctcgtcagg ggctagatga aatgtacaat
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120
gcagtacaag ttagtatgaa gcatgagatt gaacttgcca tgaagttgct ggagaaagat
180
atccatgaga aacaagatac tctgataggc cttcgacaac aactagagga agttaagca
240
attaacatag agatgtatca aaagttgcag gggtctgaag atggcttgaa agaaaaaat
300
gaaataattg cccgactaga agaaaaaacc aataaaatta ctgcagccat gaggcagctg
360
gaacaaagat tgcagcaagc agagaaggcg caaatggaag ctgaagatga ggatgagaaa
420
tatctacaag aatgtctcag taaatctgat agtctgcaga aacaaatctc ccaaaaggag
480
aaacagctgg tgcaactgga aactgacttg aagattgaga aggaatggag gcagactttg
540
caggaagatc t
551

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<210> 3236

<211> 183

<212> PRT

<213> Homo sapiens

<400> 3236

Xaa	Glu	Thr	Glu	Leu	Gln	Thr	Tyr	Lys	His	Ser	Arg	Gln	Gly	Leu	Asp		
1				5				10						15			
Glu	Met	Tyr	Asn	Glu	Ala	Arg	Arg	Gln	Leu	Arg	Asp	Glu	Ser	Gln	Leu		
			20					25					30				
Arg	Gln	Asp	Val	Glu	Asn	Glu	Leu	Ala	Val	Gln	Val	Ser	Met	Lys	His		
		35					40					45					
Glu	Ile	Glu	Leu	Ala	Met	Lys	Leu	Leu	Glu	Lys	Asp	Ile	His	Glu	Lys		
	50					55					60						
Gln	Asp	Thr	Leu	Ile	Gly	Leu	Arg	Gln	Gln	Leu	Glu	Glu	Val	Lys	Ala		
65				70				75						80			
Ile	Asn	Ile	Glu	Met	Tyr	Gln	Lys	Leu	Gln	Gly	Ser	Glu	Asp	Gly	Leu		

				85					90					95					
Lys	Glu	Lys	Asn	Glu	Ile	Ile	Ala	Arg	Leu	Glu	Glu	Lys	Thr	Asn	Lys				
			100					105					110						
Ile	Thr	Ala	Ala	Met	Arg	Gln	Leu	Glu	Gln	Arg	Leu	Gln	Gln	Ala	Glu				
		115					120					125							
Lys	Ala	Gln	Met	Glu	Ala	Glu	Asp	Glu	Asp	Glu	Lys	Tyr	Leu	Gln	Glu				
	130					135				140									
Cys	Leu	Ser	Lys	Ser	Asp	Ser	Leu	Gln	Lys	Gln	Ile	Ser	Gln	Lys	Glu				
145					150				155					160					
Lys	Gln	Leu	Val	Gln	Leu	Glu	Thr	Asp	Leu	Lys	Ile	Glu	Lys	Glu	Trp				
			165					170					175						
Arg	Gln	Thr	Leu	Gln	Glu	Asp													
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<210> 3237

<211> 1323

<212> DNA

<213> Homo sapiens

<400> 3237

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cgggcgctgt ggaccatggc tccgcccgcg gcgcctggcc gggaccgtgt gggccgtgag
120
gatgaggacc gttgggaagt acggggggac cgcaaggccc ggaagcccct ggtggagaag
180
aagcgacgcg cgcgatcaa cgagagtctt caggagtgcg ggctgctgct ggcgggcgcc
240
gaggtgcagg ccaagctgga gaacgccgaa gtgctggagc tgacggtgcg gcgggtccag
300
ggtgtgctgc ggggccgggc gcgcgagcgc gagcagctgc aggcggaagc gagcgagcgc
360
ttcgctgccg gctacatcca gtgcatgcac gaggtgcaca cgttcgctgc cacgtgccag
420
gccatcgacg ctaccgtcgc tgccgagctc ctgaaccatc tgctcgagtc catgccgctg
480
cgtgagggca gcagcttcca ggatctgctg ggggacgccc tggcggggcc acctagagcc
540
cctggacgga gtggctggcc tgccgggggc gctccgggat cccaatacc cagccccccg
600
ggtcctgggg acgacctgtg ctccgacctg gaggaggccc ctgaggctga actgagtcag
660
gctcctgctg aggggcccga cttggtgccc gcagccctgg gcagcctgac cacagcccaa
720
attgcccgga gtgtctggag gccttgggtga ccaatgccag ccagagtcct gcgggggtgg
780
gcccggccct ccctggatct cctccctcct ccagggggtt cagatgtggg ggggtagggc
840
cctggaagtc tcccaggtct tccctccctc ctctgatgga tggcttgagc ggcagccctc
900
ggtaaccagc ccagtcaggc cccagccccg tttcttaaga aacttttagg gaccctgcag
960
ctctggagtg ggtggaggga gggagctacg ggcaggagga agaattttgt agagctgcca
1020

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<210> 3238
<211> 249
<212> PRT
<213> Homo sapiens
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<210> 3239
<211> 432
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<212> DNA

<213> Homo sapiens

<400> 3239

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 60
 agaaacttgg tgagaaataa gctggcagtg attacgcgtc tccttcagaa tctgatcatg
 120
 ggtttggtcc tccttttctt cgttctgcgg gtccgaagca atgtgctaaa ggggtgctatc
 180
 caggaccgcg taggtctcct ttaccagttt gtgggcgcca ccccgtagac aggcatgctg
 240
 aacgctgtga atctgtttcc cgtgctgcga gctgtcagcg accaggagag tcaggacggc
 300
 ctctaccaga agtggcagat gatgctggcc tatgcactgc acgtcctccc cttcagcggt
 360
 gttgccacca tgattttcag cagtgtgtgc tactggacgc tgggcttaca tcctgaggtt
 420
 gcccgattgg gt
 432

<210> 3240

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3240

Lys	Thr	Lys	Asp	Ser	Pro	Gly	Val	Phe	Ser	Lys	Leu	Gly	Val	Leu	Leu
1				5				10						15	
Arg	Arg	Val	Thr	Arg	Asn	Leu	Val	Arg	Asn	Lys	Leu	Ala	Val	Ile	Thr
			20					25						30	
Arg	Leu	Leu	Gln	Asn	Leu	Ile	Met	Gly	Leu	Phe	Leu	Leu	Phe	Phe	Val
		35					40					45			
Leu	Arg	Val	Arg	Ser	Asn	Val	Leu	Lys	Gly	Ala	Ile	Gln	Asp	Arg	Val
		50				55					60				
Gly	Leu	Leu	Tyr	Gln	Phe	Val	Gly	Ala	Thr	Pro	Tyr	Thr	Gly	Met	Leu
65				70					75					80	
Asn	Ala	Val	Asn	Leu	Phe	Pro	Val	Leu	Arg	Ala	Val	Ser	Asp	Gln	Glu
			85					90					95		
Ser	Gln	Asp	Gly	Leu	Tyr	Gln	Lys	Trp	Gln	Met	Met	Leu	Ala	Tyr	Ala
			100					105					110		
Leu	His	Val	Leu	Pro	Phe	Ser	Val	Val	Ala	Thr	Met	Ile	Phe	Ser	Ser
		115					120					125			
Val	Cys	Tyr	Trp	Thr	Leu	Gly	Leu	His	Pro	Glu	Val	Ala	Arg	Leu	Gly
		130				135						140			

<210> 3241

<211> 492

<212> DNA

<213> Homo sapiens

<400> 3241

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 60

acgaaataca aaataagagg caggaagagc ccaaagcatc agaaatgtgc cagttataat
 120
 gggccaaaat cccctcttgt gtctccagaa gtatttgaaa aatacgttag gatctgcctc
 180
 acagacatgc tcccaggaca ctgcacagca aggaggtacg gcgggcccag ccagccaagg
 240
 cagaggagga catcactgcc acagcagggg gcctgactgg cagcaaaagg gacgactccg
 300
 gcgaaaagtc agcaggaaac aggacagggg ctggaccaat ggctccctc agccccacac
 360
 cccaccagc caggagcggg gcctggcccg gggcaggcgg gtgggagagc tcaactgagt
 420
 ggcagcaggg catggcccct gatgctgcag gtaccaggc tgcagctgca gaaacctcag
 480
 tgggaaccca gg
 492

<210> 3242
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 3242
 Met Gly Gln Asn Pro Leu Leu Cys Leu Gln Lys Tyr Leu Lys Asn Thr
 1 5 10 15
 Leu Gly Ser Ala Ser Gln Thr Cys Ser Gln Asp Thr Arg Gln Gln Gly
 20 25 30
 Gly Thr Ala Gly Pro Ala Ser Gln Gly Arg Gly Gly His His Cys His
 35 40 45
 Ser Arg Gly Pro Asp Trp Gln Gln Lys Gly Arg Leu Arg Arg Lys Val
 50 55 60
 Ser Arg Lys Gln Asp Arg Gly Trp Thr Asn Gly Leu Pro Gln Pro His
 65 70 75 80
 Thr Pro Pro Arg Gln Glu Arg Cys Leu Ala Arg Gly Arg Arg Val Gly
 85 90 95
 Glu Leu Thr Glu Trp Ala Ala Gly His Gly Pro
 100 105

<210> 3243
 <211> 944
 <212> DNA
 <213> Homo sapiens

<400> 3243
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 60
 ttccccaccc tttggtctgg ggcaaggagt acttacggag tgacaaaggg aaaagtctgc
 120
 tttgaggcaa aggtaacca gaatctccca atgaaagaag gctgcacaga ggtctctctc
 180
 cttcgagttg ggtggtctgt tgatttttcc cgccacagc ttggtgaaga tgaattctct
 240
 tacggtttcg atggacgagg actcaaggca gaaaatggac aatttgagga atttggccag
 300

acttttgggg agaatgatgt tattggctgc ttgctaatt ttgagactga agaagtagaa
 360
 ctttccttct ccaagaatgg agaagaccta ggtgtggcat tctggatcag caaggattcc
 420
 ctggcagacc gggcccttct accccatgtc ctctgcaaaa attgtgttgt agaattaaac
 480
 ttcggtcaga aggaggagcc cttcttccca ccaccagaag agtttgtgtt cattcatgct
 540
 gtgcctgttg aggagcgtgt acgcactgca gtccctccca agaccataga ggaatgtgag
 600
 gtgattctga tgggtgggact acccggtatct ggaaagaccc agtgggcact gaaatatgca
 660
 aaagaaaacc ctgagaaaag atacaatgtc ctgggagctg agactgtgct caatcaaattg
 720
 aggatgaagg gtctcgagga gccagagatg gaccccaaaa gccgagacct tttagttcag
 780
 caagcctccc agtgccttag taagctggtc cagattgctt cccggacaaa gaggaacttt
 840
 attcttgatc agtgtaatgt gtacaattct ggccaacggc ggaagctatt gctgttcaag
 900
 accttctctc ggaaagtggg ggtggttgtc cctaattgagg aaga
 944

<210> 3244

<211> 314

<212> PRT

<213> Homo sapiens

<400> 3244

Asp	Leu	His	Phe	Gln	Val	Ser	Lys	Asp	Arg	Tyr	Gly	Gly	Gln	Pro	Leu
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Phe	Ser	Glu	Lys	Phe	Pro	Thr	Leu	Trp	Ser	Gly	Ala	Arg	Ser	Thr	Tyr
			20					25					30		
Gly	Val	Thr	Lys	Gly	Lys	Val	Cys	Phe	Glu	Ala	Lys	Val	Thr	Gln	Asn
		35					40					45			
Leu	Pro	Met	Lys	Glu	Gly	Cys	Thr	Glu	Val	Ser	Leu	Leu	Arg	Val	Gly
	50					55					60				
Trp	Ser	Val	Asp	Phe	Ser	Arg	Pro	Gln	Leu	Gly	Glu	Asp	Glu	Phe	Ser
65					70					75					80
Tyr	Gly	Phe	Asp	Gly	Arg	Gly	Leu	Lys	Ala	Glu	Asn	Gly	Gln	Phe	Glu
				85					90					95	
Glu	Phe	Gly	Gln	Thr	Phe	Gly	Glu	Asn	Asp	Val	Ile	Gly	Cys	Phe	Ala
			100					105					110		
Asn	Phe	Glu	Thr	Glu	Glu	Val	Glu	Leu	Ser	Phe	Ser	Lys	Asn	Gly	Glu
		115					120					125			
Asp	Leu	Gly	Val	Ala	Phe	Trp	Ile	Ser	Lys	Asp	Ser	Leu	Ala	Asp	Arg
	130					135					140				
Ala	Leu	Leu	Pro	His	Val	Leu	Cys	Lys	Asn	Cys	Val	Val	Glu	Leu	Asn
145					150					155					160
Phe	Gly	Gln	Lys	Glu	Glu	Pro	Phe	Phe	Pro	Pro	Pro	Glu	Glu	Phe	Val
				165				170						175	
Phe	Ile	His	Ala	Val	Pro	Val	Glu	Glu	Arg	Val	Arg	Thr	Ala	Val	Pro
			180					185					190		
Pro	Lys	Thr	Ile	Glu	Glu	Cys	Glu	Val	Ile	Leu	Met	Val	Gly	Leu	Pro

	195		200		205										
Gly	Ser	Gly	Lys	Thr	Gln	Trp	Ala	Leu	Lys	Tyr	Ala	Lys	Glu	Asn	Pro
	210					215					220				
Glu	Lys	Arg	Tyr	Asn	Val	Leu	Gly	Ala	Glu	Thr	Val	Leu	Asn	Gln	Met
225					230					235					240
Arg	Met	Lys	Gly	Leu	Glu	Glu	Pro	Glu	Met	Asp	Pro	Lys	Ser	Arg	Asp
			245						250					255	
Leu	Leu	Val	Gln	Gln	Ala	Ser	Gln	Cys	Leu	Ser	Lys	Leu	Val	Gln	Ile
		260					265					270			
Ala	Ser	Arg	Thr	Lys	Arg	Asn	Phe	Ile	Leu	Asp	Gln	Cys	Asn	Val	Tyr
	275					280					285				
Asn	Ser	Gly	Gln	Arg	Arg	Lys	Leu	Leu	Leu	Phe	Lys	Thr	Phe	Ser	Arg
290						295					300				
Lys	Val	Val	Val	Val	Val	Pro	Asn	Glu	Glu						
305					310										

<210> 3245

<211> 980

<212> DNA

<213> Homo sapiens

<400> 3245

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 120
 ccaaccacgc agggcctctg agagacaagg tacatcccat gattctagca caggaagaag
 180
 acgacgtcct gggagaggaa gcacaaggca gcccgcacga tatcatcaga ataggtgtgg
 240
 cggggcgccc tgctcctggc agactacatc ctgttccgac aggacctctt ccgaggatgt
 300
 acagcgctgg agctcggggc cggcacgggg ctcgctagca tcatcgcagc caccatggca
 360
 cggaccgttt attgtacaga tgctcgggtgca gatcttttgt ccatgtgcca gcgaaacatt
 420
 gccctcaaca gccacctggc tgccactgga ggtggatatag ttaggggtcaa agaactggac
 480
 tggctgaagg acgacctctg cacagatccc aagggtccct tcagttgggtc acaagaggaa
 540
 atttctgacc tgtacgatca caccaccatc ctgtttgcag ccgaagtgtt ttacgacgac
 600
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 660
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 720
 acatgtgaag cctacgatca cttccgctcc tgccctgcacg cgctggagca gctcacagat
 780
 ggcaagctgc gcttcgtggg ggagcccgtg gaggcctcct tcccacagct cctgggtttac
 840
 gagcgctcc agcagctgga gctctggaag atcatcgcag aaccagtaac atgacccatc
 900
 gcctccacca ggcgcggcgt ctcgactgtt cttagagtgt atttctagta aaatcagaag
 960

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980

<210> 3246
<211> 219
<212> PRT
<213> Homo sapiens

<400> 3246
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Asp Leu Phe Arg Gly Cys Thr Ala Leu Glu Leu Gly Ala Gly Thr Gly
20 25 30
Leu Ala Ser Ile Ile Ala Ala Thr Met Ala Arg Thr Val Tyr Cys Thr
35 40 45
Asp Val Gly Ala Asp Leu Leu Ser Met Cys Gln Arg Asn Ile Ala Leu
50 55 60
Asn Ser His Leu Ala Ala Thr Gly Gly Gly Ile Val Arg Val Lys Glu
65 70 75 80
Leu Asp Trp Leu Lys Asp Asp Leu Cys Thr Asp Pro Lys Val Pro Phe
85 90 95
Ser Trp Ser Gln Glu Glu Ile Ser Asp Leu Tyr Asp His Thr Thr Ile
100 105 110
Leu Phe Ala Ala Glu Val Phe Tyr Asp Asp Asp Leu Thr Asp Ala Val
115 120 125
Phe Lys Thr Leu Ser Arg Leu Ala His Arg Leu Lys Asn Ala Cys Thr
130 135 140
Ala Ile Leu Ser Val Glu Lys Arg Leu Asn Phe Thr Leu Arg His Leu
145 150 155 160
Asp Val Thr Cys Glu Ala Tyr Asp His Phe Arg Ser Cys Leu His Ala
165 170 175
Leu Glu Gln Leu Thr Asp Gly Lys Leu Arg Phe Val Val Glu Pro Val
180 185 190
Glu Ala Ser Phe Pro Gln Leu Leu Val Tyr Glu Arg Leu Gln Gln Leu
195 200 205
Glu Leu Trp Lys Ile Ile Ala Glu Pro Val Thr
210 215

<210> 3247
<211> 977
<212> DNA
<213> Homo sapiens

<400> 3247
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120
aggttcaaca gcggcacgta taacaaccag tggatgatcg tggactacaa ggcgttcac
180
ccgggtgggc ccagccccgg gagccgggtg cttaccatcc tggagcagat ccccggcacg
240
gtggtggtgg ctgacaagac ctggagctc taccagaaga cctactgggc cagctacaac
300

ataccgtcct tcgagactgt gttcaatgcc agtgggctgc aggccctagt ggcccagtat
 360
 ggggactggg tttcttatga cgggagcccc cgggcccaga tcttcggcg gaaccagtca
 420
 ctggtacaag acatggactc catggtcagg ctgatgaggt acaatgactt cctccatgac
 480
 cctctgtcac tgtgcaaagc ctgcaacccc cagcccaatg gggagaatgc tatctccgcc
 540
 cgctccgacc tcaacccggc caatggctcc tacccttcc aggccctacg tcagcgctcc
 600
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 660
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 720
 agcggcctgc tgcacatggg ccagccagac ctctggaagt tcgcgcctgt caaggtttca
 780
 tgggactgaa gttctgtccc tgctctgctg ctttcgcccc tgctgacct cgtcagggtc
 840
 acccccgctc caaggccacc ggacttctaa ctccagcccc tctggggggc ttcgttctct
 900
 gatctggggg ctgagtcac tcctcctaga gtgggtcacg aacctgatgg ggctcagaac
 960
 tgacccccctc tctcccc
 977

<210> 3248

<211> 260

<212> PRT

<213> Homo sapiens

<400> 3248

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Tyr	Asn	Ile	Pro	Ser	Phe	Glu	Thr	Val	Phe	Asn	Ala	Ser	Gly	Leu	Gln
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Ser	Leu	Cys	Lys	Ala	Cys	Asn	Pro	Gln	Pro	Asn	Gly	Glu	Asn	Ala	Ile
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<212> DNA
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2448

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<210> 3250

<211> 849

<212> PRT

<213> Homo sapiens

<400> 3250

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			20					25					30		
Trp	Val	Pro	Thr	Asp	Cys	Phe	Ser	Leu	Ser	Leu	Ser	Pro	Pro	His	Ser
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Arg	Cys	Ser	Gly	Ala	Arg	Cys	His	Arg	Pro	Leu	Ser	Arg	Gln	Leu	Cys
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Leu	His	Arg	Leu	Ile	Gln	Glu	Gln	Leu	Arg	Tyr	Gly	Asn	Leu	Thr	Glu
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Ser	Arg	Arg	Gln	Asp	Glu	Ala	Leu	Arg	Glu	Leu	Arg	His	Gly	His	Val
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Pro	Pro	Val	Phe	Leu	Gln	Gln	Gln	Gln	Gln	Tyr	Gln	Tyr	Leu	Gln	Gln

2452

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Thr	Thr	Ala	Asp	Arg	Ala	Pro	Thr	Glu	Glu	Pro	Val	Val	Thr	Ala	Pro
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Asp	Gly	Pro	Pro	Asp	Ser	Thr	Ser	Thr	Cys	Leu	Pro	Pro	Glu	Pro	Asp
				805					810					815	
Ser	Leu	Leu	Gly	Cys	Ser	Ser	Ser	Gln	Arg	Ala	Ala	Ser	Leu	Asp	Ser
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<210> 3251

<211> 2595

<212> DNA

<213> Homo sapiens

<400> 3251

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<211> 254

<212> PRT

<213> Homo sapiens

<400> 3252

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Val Val Asp Leu Ile Phe Leu Asn Thr Glu Val Ser Leu Ser Gln Ala
          35           40           45
Leu Glu Asp Val Ser Arg Gly Gly Ser Pro Phe Ala Ile Val Ile Thr
          50           55           60
Gln Gln His Gln Ile His Arg Ser Cys Thr Val Asn Ile Met Phe Gly
65           70           75           80
Thr Pro Gln Glu His Arg Asn Met Pro Gln Ala Asp Ala Met Val Leu
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Arg Glu Glu Ile Ala Arg Gln Ala Ala Lys Met Ala Asp Glu Ala Ile
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Tyr Leu Thr Ala Glu Glu Thr Asp Lys Ile Ile Asn Tyr Leu Arg Glu
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Leu Arg Gly Arg Pro Arg Pro Asp Phe Pro Pro Thr Thr Arg Gly Asp
          195          200          205
Leu Gly Cys Leu Ala Glu Asp Thr Ala Lys Leu Pro Thr Ala Pro Glu
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<212> DNA

<213> Homo sapiens

<400> 3253

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240

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<210> 3254

<211> 180

<212> PRT

<213> Homo sapiens

<400> 3254

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Tyr	Ser	Arg	Val	Thr	Pro	Gln	Glu	Gln	Ala	Lys	Leu	Asp	Ala	Gln	Leu	35	40	45	
Arg	Asp	Lys	Glu	Phe	Tyr	Arg	Pro	Ile	Pro	Asn	Pro	Asn	Pro	Lys	Leu	50	55	60	
Thr	Asp	Gly	Tyr	Pro	Ala	Phe	Lys	Arg	Pro	His	Met	Thr	Ala	Lys	Asp	65	70	75	80
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Glu	Asp	Glu	Arg	Lys	Phe	Thr	Ser	Thr	Cys	His	Phe	Thr	Tyr	Pro	Ala	100	105	110	
Ser	His	Asp	Leu	His	Leu	Ala	Gln	Gly	Asp	Pro	Asn	Gln	Val	Leu	Gln	115	120	125	
Ser	Ala	Asp	Phe	Pro	Cys	Leu	Val	Asp	Pro	Lys	His	Gln	Pro	Ala	Ala	130	135	140	
Glu	Met	Ala	Lys	Gly	Tyr	Leu	Leu	Leu	Pro	Gly	Cys	Pro	Cys	Leu	His	145	150	155	160
Cys	His	Ile	Val	Lys	Val	Pro	Ile	Leu	Asn	Arg	Trp	Gly	Pro	Leu	Met	165	170	175	
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<210> 3255

<211> 724

<212> DNA

<213> Homo sapiens

<400> 3255

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<210> 3256

<211> 169

<212> PRT

<213> Homo sapiens

<400> 3256

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		20						25				30			
Gly	Arg	Asn	Glu	Ala	Gly	Glu	Arg	His	Gly	Arg	Gly	Arg	Ala	Arg	Leu
		35					40					45			
Pro	Asn	Gly	Asp	Thr	Tyr	Glu	Gly	Ser	Tyr	Glu	Phe	Gly	Lys	Arg	His
	50					55					60				
Gly	Gln	Gly	Ile	Tyr	Lys	Phe	Lys	Asn	Gly	Ala	Arg	Tyr	Ile	Gly	Glu
65			70						75					80	
Tyr	Val	Arg	Asn	Lys	Lys	His	Gly	Gln	Gly	Thr	Phe	Ile	Tyr	Pro	Asp
			85					90					95		
Gly	Ser	Arg	Tyr	Glu	Gly	Glu	Trp	Ala	Asn	Asp	Leu	Arg	His	Gly	His
		100						105					110		
Gly	Val	Tyr	Tyr	Tyr	Ile	Asn	Asn	Asp	Thr	Tyr	Thr	Gly	Glu	Trp	Phe
		115				120						125			
Ala	His	Gln	Arg	His	Gly	Gln	Gly	Thr	Tyr	Leu	Tyr	Ala	Glu	Thr	Gly
	130				135						140				
Ser	Lys	Tyr	Val	Gly	Thr	Trp	Val	Asn	Gly	Gln	Gln	Glu	Gly	Thr	Ala
145					150				155						160
Glu	Leu	Ile	His	Leu	Asn	His	Arg	Tyr							

<210> 3257

<212> DNA

<213> Homo sapiens

<400> 3257

nccccggggt acatagactc cccacctac agccggcagg gcatgtcccc caccttctcc
60

cgctcacctc accactacta ccgctctggt gatttgtcta cagcaaccaa gagcgaaaca
120

agtgaagaca tcagccagac ctccaagtac agtcccatct actcgccaga cccctactat
180

gcttcggagt ctgagtactg gacctaccat gggccccca aagtgccccg agccagaagg
240

ttctcgtctg gaggagagga ggatgatttt gaccgcagca tgcacaagct ccaaagtgga
300

attggccggc tgattctgaa ggaagaaatg aaggcccggg cgagctccta tgcagatccc
360

تغیحات

368

<210> 3258

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3258

Xaa Pro Gly Tyr Ile Asp Ser Pro Thr Tyr Ser Arg Gln Gly Met Ser
1 5 10 15

Pro Thr Phe Ser Arg Ser Pro His His Tyr Tyr Arg Ser Gly Asp Leu
20 25 30

Ser Thr Ala Thr Lys Ser Glu Thr Ser Glu Asp Ile Ser Gln Thr Ser
35 40 45

Lys Tyr Ser Pro Ile Tyr Ser Pro Asp Pro Tyr Tyr Ala Ser Glu Ser
50 55 60

Glu Tyr Trp Thr Tyr His Gly Ser Pro Lys Val Pro Arg Ala Arg Arg
65 70 75 80

Phe Ser Ser Gly Gly Glu Glu Asp Asp Phe Asp Arg Ser Met His Lys
85 90 95

Leu Gln Ser Gly Ile Gly Arg Leu Ile Leu Lys Glu Glu Met Lys Ala
100 105 110

Arg Ser Ser Ser Tyr Ala Asp Pro Trp Arg
115 120

<210> 3259

<211> 747

<212> DNA

<213> Homo sapiens

<400> 3259

acgcgtgaag ggcgccacct ctgctgcagc actggccacc cggacacgc tgcagggcca
60

gtgctcagcc ttcgtacagc tctgggcccgg cctgcagccc atcttgtgtg gcaacaaccg
 120
 caccattgaa cccggagcgc tgcggcgggg caacatgagc tccctgggct ttacgagcaa
 180
 ggagcagcgg aacctggggc ttctcgtgca cctcatgacc agcaacccca aaatcctgta
 240
 cgcgcctgcg ggctctgagg tcgaccgcgt catcctcaag gccaacgaga cttttgcttt
 300
 tgtgggcaac gtgactcact atgcccaggt ctgggtcaac atctcggcgg agatccgcag
 360
 cttcctggag cagggcaggc tgcagcaaca cctgcgctgg ctgcagcagt atgtagcaga
 420
 gctgcggctg caccctgagg cactgaacct gtcactggat gagctgccgc cggccctgag
 480
 acaggacaac ttctcgtgct ccagtggcat ggccctcctg cagcagctgg ataccattga
 540
 caacgcggcc tgcggctgga tccagttcat gtccaaggtg agcgtggaca tcttcaaggg
 600
 cttccccgac gaggagagca ttgtcaacta caccctcaac caggcctacc aggacaacgt
 660
 cactgttttt gccagtgtga tcttccagac ccggaaggac ggctcgtccc gcctcacgtg
 720
 cactacaaga tccgccagaa ctccagc
 747

<210> 3260

<211> 197

<212> PRT

<213> Homo sapiens

<400> 3260

Met	Ser	Ser	Leu	Gly	Phe	Thr	Ser	Lys	Glu	Gln	Arg	Asn	Leu	Gly	Leu
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Leu	Val	His	Leu	Met	Thr	Ser	Asn	Pro	Lys	Ile	Leu	Tyr	Ala	Pro	Ala
			20					25					30		
Gly	Ser	Glu	Val	Asp	Arg	Val	Ile	Leu	Lys	Ala	Asn	Glu	Thr	Phe	Ala
		35					40					45			
Phe	Val	Gly	Asn	Val	Thr	His	Tyr	Ala	Gln	Val	Trp	Leu	Asn	Ile	Ser
	50					55					60				
Ala	Glu	Ile	Arg	Ser	Phe	Leu	Glu	Gln	Gly	Arg	Leu	Gln	Gln	His	Leu
65					70				75					80	
Arg	Trp	Leu	Gln	Gln	Tyr	Val	Ala	Glu	Leu	Arg	Leu	His	Pro	Glu	Ala
			85					90					95		
Leu	Asn	Leu	Ser	Leu	Asp	Glu	Leu	Pro	Pro	Ala	Leu	Arg	Gln	Asp	Asn
		100						105					110		
Phe	Ser	Leu	Pro	Ser	Gly	Met	Ala	Leu	Leu	Gln	Gln	Leu	Asp	Thr	Ile
		115				120						125			
Asp	Asn	Ala	Ala	Cys	Gly	Trp	Ile	Gln	Phe	Met	Ser	Lys	Val	Ser	Val
	130				135					140					
Asp	Ile	Phe	Lys	Gly	Phe	Pro	Asp	Glu	Glu	Ser	Ile	Val	Asn	Tyr	Thr
145				150					155					160	
Leu	Asn	Gln	Ala	Tyr	Gln	Asp	Asn	Val	Thr	Val	Phe	Ala	Ser	Val	Ile
		165						170					175		
Phe	Gln	Thr	Arg	Lys	Asp	Gly	Ser	Ser	Arg	Leu	Thr	Cys	Thr	Thr	Arg

180
Ser Ala Arg Thr Pro
195

185

190

<210> 3261

<211> 1323

<212> DNA

<213> Homo sapiens

<400> 3261

nnacgcgtac agccaccttc cttaccgccg gccctgccgg gagcctgctt cttatcattt
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gcacctcatt gctttcctca cctgccatct cacacgtggc tgccctgtgt tgccctgtg
120
tgctgtgcca attgtgtttt tttgctctgt gtacattttg gttttatttg gggttgctgt
180
tgatgatttc ctttgttccg gtgttctgtc tcccctcgct ggctgtgtgg gggctgctg
240
gcccgtgct tgccgcctcc atagatcccc gttgcgcagc catctgtcat ggacgacatt
300
gagggtgtggc tcaggaccga cctgaagggt gatgatctgg aggagggtgt cacaagtga
360
gagtttgata aattccttga agaaagagcc aaagctgctg aaatggttcc cgacctcccc
420
tcgcccccca tggaggctcc tgccccagcc tcaaaccctt ctggccggaa gaagccagag
480
cggtcagagg atgccctctt cgccctgtga gcagctctgt ggtttgctc cccagatggc
540
gggtccccgc ttgcaccccg tggacaccgg gcaactggcca ctctacatc cccagctcca
600
cacggcctgc acacctgtgt ttccatggaa atgccaccgt gtctgctccc aggcctccca
660
ctagtcagga ccagcttcag ccacttcttt tctctgagtg gtgggacaac tgcagccaga
720
gactctctcc cctcccacca tggggccctc tgcccatgtt tcctcccagg aagagcgggc
780
agagtggccc agccccaggc agtgcttcct gagcagacca cccggactgt ctttcctcca
840
cccggccatg gagaaagagc acgcccggcc ccgcccgtgt ctcacctctg cctggctcag
900
tgaccttctc aggcattctg ccctcctggg cccctctctc cctgaagggg ctttgtggca
960
tctctggaag agcagggtgt gctgcaactc tgggcctggg ctcaactcctt ggacttgtca
1020
ccttggtgaca tttggcttac cagcatttga gaaggctctg ctgggtctcc atggtggggg
1080
tctctcacct tcttgacctt ctctccatca ttcagctgcc agcccaggct tcacacccaa
1140
gctggctcag cagccgagcc tggcaccgag ggtccctgca ggctccctgg gcagggagag
1200
ggccaaggac aattgggagg gcagcaggca gcccgcagat ggtggccatg tggcacgctg
1260
ctgagacgac actaccaata aaccaaactg ccacgcacaa aaaaaaaaaa aaaaaaaaaa
1320

aaa
1323

<210> 3262
<211> 81
<212> PRT
<213> Homo sapiens

<400> 3262
Ile Pro Val Ala Gln Pro Ser Val Met Asp Asp Ile Glu Val Trp Leu
1 5 10 15
Arg Thr Asp Leu Lys Gly Asp Asp Leu Glu Glu Gly Val Thr Ser Glu
20 25 30
Glu Phe Asp Lys Phe Leu Glu Glu Arg Ala Lys Ala Ala Glu Met Val
35 40 45
Pro Asp Leu Pro Ser Pro Pro Met Glu Ala Pro Ala Pro Ala Ser Asn
50 55 60
Pro Ser Gly Arg Lys Lys Pro Glu Arg Ser Glu Asp Ala Leu Phe Ala
65 70 75 80
Leu

<210> 3263
<211> 1128
<212> DNA
<213> Homo sapiens

<400> 3263
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cggggacgca agggccgggg ccgggggtccc ccgtcctcct ctgactccga gcccgaggcc
120
gagctggaga gagaggccaa gaaatcagcg aagaagccgc agtcctcaag cacagagccc
180
gccaggaaac ctggccagaa ggagaagaga gtgcggcccg aggagaagca acaagccaag
240
cccgtgaagg tggagcggac ccggaagcgg tccgagggct tctcgatgga caggaaggta
300
gagaagaaga aagagccctc cgtggaggag aagctgcaga agctgcacag tgagatcaag
360
tttgccttaa aggtcgacag cccggacgtg aaggggtgcc tgaatgccct agaggagctg
420
ggaaccctgc aggtgacctc tcagatcctc cagaagaaca cagacgtggt ggccaccttg
480
aagaagattc gccgttacaa agcgaacaag gacgtaatgg agaaggcagc agaagtctat
540
accgggtca agtcgcggtt cctcggccca aagatcgagg cggcgcagaa agtgaacaag
600
gctgggatgg agaaggagaa ggccgaggag aagctggccg gggaggagct ggccggggag
660
gaggcccccc aggagaaggc ggaggacaag cccagcaccg atctctcagc ccagtgat
720
ggcgaggcca catcacagaa gggggagagc gcagaggaca aggagcacga ggagggtcgg
780

gactcggagg aggggccaag gtgtggctcc tctgaagacc tgcacgacag cgtacgggag
 840
 ggtcccgacc tggacaggcc tgggagcgac cggcaggagc gcgagagggc acggggggac
 900
 tcggaggccc tggacgagga gagctgagcc gcgggcagcc aggcccagcc cccgcccag
 960
 ctcaggctgc ccctctcctt ccccggtctg caggagagca gagcagagaa ctgtggggaa
 1020
 cgctgtgctg tttgtatttg ttcccttggg ttttttttct ctgcctaatt tctgtgattt
 1080
 ccaaccaaca tgaaatgact ataaatgggt tttttaatga aaaaaaaaa
 1128

<210> 3264

<211> 308

<212> PRT

<213> Homo sapiens

<400> 3264

Ser	Arg	Tyr	Arg	Arg	Ser	Ser	Gly	Asp	Glu	Leu	Arg	Glu	Asp	Asp	Glu
1				5				10					15		
Pro	Val	Lys	Lys	Arg	Gly	Arg	Lys	Gly	Arg	Gly	Arg	Gly	Pro	Pro	Ser
			20					25					30		
Ser	Ser	Asp	Ser	Glu	Pro	Glu	Ala	Glu	Leu	Glu	Arg	Glu	Ala	Lys	Lys
		35					40					45			
Ser	Ala	Lys	Lys	Pro	Gln	Ser	Ser	Ser	Thr	Glu	Pro	Ala	Arg	Lys	Pro
	50					55				60					
Gly	Gln	Lys	Glu	Lys	Arg	Val	Arg	Pro	Glu	Glu	Lys	Gln	Gln	Ala	Lys
65					70				75						80
Pro	Val	Lys	Val	Glu	Arg	Thr	Arg	Lys	Arg	Ser	Glu	Gly	Phe	Ser	Met
			85					90					95		
Asp	Arg	Lys	Val	Glu	Lys	Lys	Lys	Glu	Pro	Ser	Val	Glu	Glu	Lys	Leu
			100					105					110		
Gln	Lys	Leu	His	Ser	Glu	Ile	Lys	Phe	Ala	Leu	Lys	Val	Asp	Ser	Pro
		115					120					125			
Asp	Val	Lys	Gly	Cys	Leu	Asn	Ala	Leu	Glu	Glu	Leu	Gly	Thr	Leu	Gln
	130					135					140				
Val	Thr	Ser	Gln	Ile	Leu	Gln	Lys	Asn	Thr	Asp	Val	Val	Ala	Thr	Leu
145					150					155					160
Lys	Lys	Ile	Arg	Arg	Tyr	Lys	Ala	Asn	Lys	Asp	Val	Met	Glu	Lys	Ala
			165					170					175		
Ala	Glu	Val	Tyr	Thr	Arg	Leu	Lys	Ser	Arg	Val	Leu	Gly	Pro	Lys	Ile
		180						185					190		
Glu	Ala	Val	Gln	Lys	Val	Asn	Lys	Ala	Gly	Met	Glu	Lys	Glu	Lys	Ala
		195					200					205			
Glu	Glu	Lys	Leu	Ala	Gly	Glu	Glu	Leu	Ala	Gly	Glu	Glu	Ala	Pro	Gln
	210					215					220				
Glu	Lys	Ala	Glu	Asp	Lys	Pro	Ser	Thr	Asp	Leu	Ser	Ala	Pro	Val	Asn
225					230					235					240
Gly	Glu	Ala	Thr	Ser	Gln	Lys	Gly	Glu	Ser	Ala	Glu	Asp	Lys	Glu	His
			245					250					255		
Glu	Glu	Gly	Arg	Asp	Ser	Glu	Glu	Gly	Pro	Arg	Cys	Gly	Ser	Ser	Glu
		260						265					270		
Asp	Leu	His	Asp	Ser	Val	Arg	Glu	Gly	Pro	Asp	Leu	Asp	Arg	Pro	Gly

275 280 285
 Ser Asp Arg Gln Glu Arg Glu Arg Ala Arg Gly Asp Ser Glu Ala Leu
 290 295 300
 Asp Glu Glu Ser
 305

<210> 3265
 <211> 524
 <212> DNA
 <213> Homo sapiens

<400> 3265
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 60
 ctttttcgtg gttttcaaaa tgtttccatt gagggcgtat tacttttata atcaacaaaa
 120
 gagaaagtat aacttcattt tagaaattct cacctaaggc atttgaaaaa taatccaaaa
 180
 ggtacattat tggtgatttt tcttccttct agaaaggatc ttgttcgagt agaagccaca
 240
 gtcattgaaa agacagaatc atggccaaga atcattatga gattcaggaa aaggaaaaac
 300
 ttcaagaaga aaagaagtaa gttagagaaa gtaccgctgg gccctgttgc acggtgctgg
 360
 ttgcccaggc gcatgcggac ggaggggtgtg gggcacgtgg gtctcgggac aggaagccca
 420
 ggcaggtctc aacctggctg ccactgcccc cttgccaccc tcatcctaga gggagcacc
 480
 agaggggtcca gcctcgctcc ccttctcttc cacgctccac gcgt
 524

<210> 3266
 <211> 82
 <212> PRT
 <213> Homo sapiens

<400> 3266
 Met Arg Phe Arg Lys Arg Lys Asn Phe Lys Lys Lys Arg Ser Lys Leu
 1 5 10 15
 Glu Lys Val Pro Leu Gly Pro Val Ala Arg Cys Trp Leu Pro Arg Arg
 20 25 30
 Met Arg Thr Glu Gly Val Gly His Val Gly Leu Gly Thr Gly Ser Pro
 35 40 45
 Gly Arg Ser Gln Pro Gly Cys His Cys Pro Leu Ala Thr Leu Ile Leu
 50 55 60
 Glu Gly Ala Pro Arg Gly Ser Ser Leu Ala Pro Leu Leu Leu His Ala
 65 70 75 80
 Pro Arg

<210> 3267
 <211> 393
 <212> DNA
 <213> Homo sapiens

<400> 3267

gtcgaatatg catgcagagt acaggggttta gaacatgaca tggaagagat caatgctcga
60
tggaatacat tgaataaaaa ggtcgcacaa agaattgcac agctacagga agctttgttg
120
cattgtggga agtttcaaga tgccttggag ccattgctca gctggttggc agataccgag
180
gagctcatag ccaatcagaa acctccatct gctgagtata aagtggtgaa agcacagatc
240
caagaacaga agttgctcca gcggctccta gatgatcgaa aggccacagt agacatgctt
300
caagcagaag gaggcagaat agcccagtca gcagagctgg ctgatagaga gaaaatcact
360
ggacagctgg agagtcttga aagtagatgg act
393

<210> 3268

<211> 131

<212> PRT

<213> Homo sapiens

<400> 3268

Val	Glu	Tyr	Ala	Cys	Arg	Val	Gln	Gly	Leu	Glu	His	Asp	Met	Glu	Glu
1				5				10						15	
Ile	Asn	Ala	Arg	Trp	Asn	Thr	Leu	Asn	Lys	Lys	Val	Ala	Gln	Arg	Ile
			20					25					30		
Ala	Gln	Leu	Gln	Glu	Ala	Leu	Leu	His	Cys	Gly	Lys	Phe	Gln	Asp	Ala
		35					40					45			
Leu	Glu	Pro	Leu	Leu	Ser	Trp	Leu	Ala	Asp	Thr	Glu	Glu	Leu	Ile	Ala
	50					55				60					
Asn	Gln	Lys	Pro	Pro	Ser	Ala	Glu	Tyr	Lys	Val	Val	Lys	Ala	Gln	Ile
65					70					75				80	
Gln	Glu	Gln	Lys	Leu	Leu	Gln	Arg	Leu	Leu	Asp	Asp	Arg	Lys	Ala	Thr
			85					90					95		
Val	Asp	Met	Leu	Gln	Ala	Glu	Gly	Gly	Arg	Ile	Ala	Gln	Ser	Ala	Glu
			100					105					110		
Leu	Ala	Asp	Arg	Glu	Lys	Ile	Thr	Gly	Gln	Leu	Glu	Ser	Leu	Glu	Ser
		115					120					125			
Arg	Trp	Thr													
		130													

<210> 3269

<211> 1423

<212> DNA

<213> Homo sapiens

<400> 3269

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tttgaagctg taactttatg agcgattatt tactaccttt gagaaatgtg ttttagtata
120
aatatatagga tgtggaagcg aaaaaatatt tgggtagcaa gtgaggtgta ctcaaaaata
180

agcaaaagtc acgtgggtct gattttatac cctcgctgga aagcttggtc tcagacacac
 240
 tgttactgca agtgtgtgtg agggggaaac tctcacacac tttgcagttg aggacagggc
 300
 tagactttga ggtggaccct ggctcccagg gctgtgtact cccagcccgt gtttctcttt
 360
 tgctcagact gaacaagtgg aacgaaatta cattaaagaa aagaaggcag cagtgaagaa
 420
 atttgaagac aagaagggtg agctgaaaga gaacctgatt gctgagctag aagaaaagaa
 480
 gaaaatgatt gaaaacgaaa tgctgacaat ggaactgaat ggagattcta tggaggtgaa
 540
 acctatcatg accagaaagt tgcggaggcg accaaatgat cccgtcccca tcccagacaa
 600
 gaggaggaaa cctgctccag cccagctaaa ctatttggtta acagatgaac agatcatgga
 660
 ggatctgaga acattaaata agcttaagtc acccaagaga ccagcatctc catcctctcc
 720
 tgagcacttg cctgcaacac ccgcggaatc tccagcacag agatttgagg cgcgataga
 780
 agatggcaaa ctgtattatg acaaaagatg gtaccacaag agccaggcca tctatctgga
 840
 gtcaaaggac aaccagaaac tgagctgcgt gatcagttct gtaggagcca atgagatctg
 900
 ggtgaggaag acaagtgaca gcaccaagat gaggatctac ctgggtcagc ttcagcgagg
 960
 gctcttcgtg atccgccggc gctcagctgc ttgactttct acagtgtctt tctcttgacc
 1020
 ctttttctgg agtgggtttt atttttgttt tgtttcgttt tctccttaat agaaaaatgt
 1080
 taacttactg ggaatagcta ctcagccttg gaaatggaga gcactgcagt gaattcttta
 1140
 gggcactttt gtggccggat gcttccaact ttgtcagctt tttctgcctc aacttcttcc
 1200
 agacatcagt caccatgaga ctgttttact ttcaggcgta ttgggggggt tgatttactt
 1260
 tccttttatt tctttatttt ttgcttatac ttgtttttga aaacctcttc tgagtttgaa
 1320
 gggacagcta tttttattga ttatctttta gtctctctac catggagaag agcaggaagg
 1380
 gatacactct ccagtgcatt ttcattgttt gaatcggatt agt
 1423

<210> 3270

<211> 169

<212> PRT

<213> Homo sapiens

<400> 3270

Met	Ile	Glu	Asn	Glu	Met	Leu	Thr	Met	Glu	Leu	Asn	Gly	Asp	Ser	Met
1				5					10					15	
Glu	Val	Lys	Pro	Ile	Met	Thr	Arg	Lys	Leu	Arg	Arg	Arg	Pro	Asn	Asp
			20					25					30		
Pro	Val	Pro	Ile	Pro	Asp	Lys	Arg	Arg	Lys	Pro	Ala	Pro	Ala	Gln	Leu

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      35      40      45
Asn Tyr Leu Leu Thr Asp Glu Gln Ile Met Glu Asp Leu Arg Thr Leu
  50      55      60
Asn Lys Leu Lys Ser Pro Lys Arg Pro Ala Ser Pro Ser Ser Pro Glu
65      70      75      80
His Leu Pro Ala Thr Pro Ala Glu Ser Pro Ala Gln Arg Phe Glu Ala
      85      90      95
Arg Ile Glu Asp Gly Lys Leu Tyr Tyr Asp Lys Arg Trp Tyr His Lys
      100      105      110
Ser Gln Ala Ile Tyr Leu Glu Ser Lys Asp Asn Gln Lys Leu Ser Cys
      115      120      125
Val Ile Ser Ser Val Gly Ala Asn Glu Ile Trp Val Arg Lys Thr Ser
      130      135      140
Asp Ser Thr Lys Met Arg Ile Tyr Leu Gly Gln Leu Gln Arg Gly Leu
145      150      155      160
Phe Val Ile Arg Arg Arg Ser Ala Ala
      165

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<210> 3271
 <211> 464
 <212> DNA
 <213> Homo sapiens

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<400> 3271
tcatgagcag ggccaattc tggtctctct gtggtcgcca tccatgtgct gggcgtcact
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gaaggcactg gggatacagc cgagcacaag atggacagag atccctggcc cctcggagca
120
ggcagtctgt ggctctggcc cctccagttc cttgtcacca ggagataggc aatgcagctg
180
atgagaaggg ccccggcagc aagagatcca atgatggtgg ccgccaggat cccagcgttg
240
gtgggcaggt gtgtactggg cagctcetta ttcttttcag ctacctggac ctcagtcttg
300
gccttcatag tccattcaga gttgatggta atggctactt ggtaggtgcc actgtctgta
360
ggctgggcgc ggcgcagcag catggaacca ttggggaagc ccacgatgtc tcgctgtccc
420
atggcactgc catccctctg aggcggttgt atccccaggg atgt
464

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<210> 3272
 <211> 140
 <212> PRT
 <213> Homo sapiens

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<400> 3272
Met Gly Gln Arg Asp Ile Val Gly Phe Pro Asn Gly Ser Met Leu Leu
  1      5      10      15
Arg Arg Ala Gln Pro Thr Asp Ser Gly Thr Tyr Gln Val Ala Ile Thr
      20      25      30
Ile Asn Ser Glu Trp Thr Met Lys Ala Lys Thr Glu Val Gln Val Ala
      35      40      45
Glu Lys Asn Lys Glu Leu Pro Ser Thr His Leu Pro Thr Asn Ala Gly

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      50              55              60
Ile Leu Ala Ala Thr Ile Ile Gly Ser Leu Ala Ala Gly Ala Leu Leu
65              70              75              80
Ile Ser Cys Ile Ala Tyr Leu Leu Val Thr Arg Asn Trp Arg Gly Gln
      85              90              95
Ser His Arg Leu Pro Ala Pro Arg Gly Gln Gly Ser Leu Ser Ile Leu
      100              105              110
Cys Ser Ala Val Ser Pro Val Pro Ser Val Thr Pro Ser Thr Trp Met
      115              120              125
Ala Thr Thr Glu Lys Pro Glu Leu Gly Pro Ala His
      130              135              140

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<210> 3273

<211> 387

<212> DNA

<213> Homo sapiens

<400> 3273

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ngcgcgccag ggatggaaaa ctttattctg tatgaggaga tcggaagagg aagcaagact
60
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120
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<210> 3274

<211> 129

<212> PRT

<213> Homo sapiens

<400> 3274

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Phe Val Ala Ile Leu Cys Thr Asp Lys Cys Arg Arg Pro Glu Ile Thr
      35              40              45
Asn Trp Val Arg Leu Thr Arg Glu Ile Lys His Lys Asn Ile Val Thr
      50              55              60
Phe His Glu Trp Tyr Glu Thr Ser Asn His Leu Trp Leu Val Val Glu
65              70              75              80
Leu Arg Thr Gly Gly Ser Leu Lys Thr Val Ile Ala Gln Asp Glu Asn
      85              90              95
Leu Pro Glu Asp Val Val Arg Glu Phe Gly Ile Asp Leu Ile Ser Gly
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Gly

<210> 3275
<211> 1266
<212> DNA
<213> Homo sapiens

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<400> 3277
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<210> 3278

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3278

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Tyr	Ser	Met	Val	Ala	Gly	Ala	Gly	Arg	Glu	Asn	Gly	Met	Glu	Thr	Pro
			20					25					30		
Met	His	Glu	Asn	Pro	Glu	Trp	Glu	Lys	Ala	Arg	Gln	Ala	Leu	Ala	Ser
		35					40					45			
Ile	Ser	Lys	Ser	Gly	Ala	Ala	Gly	Gly	Ser	Ala	Lys	Ser	Ser	Ser	Asn
	50					55					60				
Gly	Pro	Val	Ala	Ser	Ala	Ser	Thr	Cys	Pro	Arg	Gln	Lys	Pro	Gln	Leu
65					70					75				80	
Cys	Ser	Ser	Ser	Ser	Thr	Thr	Ser	Gly	Thr	Ser	Ser	Thr	Thr	Met	Pro
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<210> 3279

<211> 1130

<212> DNA

<213> Homo sapiens

<400> 3279

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 120

cctgagccag aaccaggcac catggtggag aagggatcag atagctcctc agagaagggg
 180
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<210> 3280

<211> 376

<212> PRT

<213> Homo sapiens

<400> 3280

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Gly	Arg	Ser	Thr	Pro	Ser	Ser	Ser	Pro	Ser	Leu	Arg	Lys	Arg	Leu	Gln
			20					25					30		
Leu	Leu	Pro	Pro	Ser	Arg	Pro	Pro	Pro	Glu	Pro	Glu	Pro	Gly	Thr	Met
		35					40					45			
Val	Glu	Lys	Gly	Ser	Asp	Ser	Ser	Ser	Glu	Lys	Gly	Gly	Val	Pro	Gly
	50					55					60				
Thr	Pro	Ser	Thr	Gln	Ser	Leu	Gly	Ser	Arg	Asn	Phe	Ile	Arg	Asn	Ser
65					70				75					80	
Lys	Lys	Met	Gln	Ser	Trp	Tyr	Ser	Met	Leu	Ser	Pro	Thr	Tyr	Lys	Gln
			85					90						95	
Arg	Asn	Glu	Asp	Phe	Arg	Lys	Leu	Phe	Ser	Lys	Leu	Pro	Glu	Ala	Glu

360

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<210> 3282

<211> 146

<212> PRT

<213> Homo sapiens

<400> 3282

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			20					25					30		
Pro	Trp	Pro	Arg	Gln	Pro	Gly	Gly	Cys	Trp	Thr	Val	Gly	Leu	Pro	Ala
		35				40					45				
Thr	Ser	Phe	Ala	Arg	Gly	Lys	Glu	His	His	Val	Gly	His	Ile	His	Glu
	50					55					60				
Gly	Thr	Gly	Asn	Ser	Val	Val	Pro	Ser	Val	Thr	Pro	Cys	Gln	Asp	Thr
65				70				75						80	
Gln	Asp	Glu	Asn	Pro	Ala	Pro	Glu	Arg	Ala	Ala	Gly	Ile	Ser	Ser	Thr
			85					90					95		
His	Thr	Gln	Ala	Leu	Cys	Pro	Gln	Ala	Pro	Pro	Ser	Val	Leu	Pro	Gly
			100					105					110		
Asn	Asn	Thr	Leu	Cys	Glu	Pro	Val	Val	Glu	Pro	Gly	Thr	Ala	Trp	Ala
		115					120					125			
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<210> 3283

<211> 3268

<212> DNA

<213> Homo sapiens

<400> 3283

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<210> 3284
 <211> 1012
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<400> 3284
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 35 40 45
 Met Glu His Lys Ala Thr Thr Ile Gln Lys His Val Arg Gly Trp Met
 50 55 60
 Ala Arg Arg His Phe Gln Arg Leu Arg Asp Ala Ala Ile Val Ile Gln
 65 70 75 80
 Cys Ala Phe Arg Met Leu Lys Ala Arg Arg Glu Leu Lys Ala Leu Arg
 85 90 95
 Ile Glu Ala Arg Ser Ala Glu His Leu Lys Arg Leu Asn Val Gly Met
 100 105 110
 Glu Asn Lys Val Val Gln Leu Gln Arg Lys Ile Asp Glu Gln Asn Lys
 115 120 125
 Glu Phe Lys Thr Leu Ser Glu Gln Leu Ser Val Thr Thr Ser Thr Tyr
 130 135 140
 Thr Met Glu Val Glu Arg Leu Lys Lys Glu Leu Val His Tyr Gln Gln
 145 150 155 160
 Ser Pro Gly Glu Asp Thr Ser Leu Arg Leu Gln Glu Glu Val Glu Ser
 165 170 175
 Leu Arg Thr Glu Leu Gln Arg Ala His Ser Glu Arg Lys Ile Leu Glu
 180 185 190
 Asp Ala His Ser Arg Glu Lys Asp Glu Leu Arg Lys Arg Val Ala Asp
 195 200 205
 Leu Glu Gln Glu Asn Ala Leu Leu Lys Asp Glu Lys Glu Gln Leu Asn
 210 215 220
 Asn Gln Ile Leu Cys Gln Ser Lys Asp Glu Phe Ala Gln Asn Ser Val
 225 230 235 240
 Lys Glu Asn Leu Leu Met Lys Lys Glu Leu Glu Glu Glu Arg Ser Arg
 245 250 255
 Tyr Gln Asn Leu Val Lys Glu Tyr Ser Gln Leu Glu Gln Arg Tyr Asp
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 Asn Leu Arg Asp Glu Met Thr Ile Ile Lys Gln Thr Pro Gly His Arg
 275 280 285
 Arg Asn Pro Ser Asn Gln Ser Ser Leu Glu Ser Asp Ser Asn Tyr Pro
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 Ser Ile Ser Thr Ser Glu Ile Gly Asp Thr Glu Asp Ala Leu Gln Gln
 305 310 315 320
 Val Glu Glu Ile Gly Leu Glu Lys Ala Ala Met Asp Met Thr Val Phe
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 Leu Lys Leu Gln Lys Arg Val Arg Glu Leu Glu Gln Glu Arg Lys Lys
 340 345 350
 Leu Gln Val Gln Leu Glu Lys Arg Glu Gln Gln Asp Ser Lys Lys Val
 355 360 365
 Gln Ala Glu Pro Pro Gln Thr Asp Ile Asp Leu Asp Pro Asn Ala Asp

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385	390	395
Lys Leu Lys Asn Asp	Leu Asn Glu Leu Arg	Lys Ala Val Ala Asp Gln
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Tyr His Gly Val Cys Gln Thr Asn Arg Leu Leu Glu Ala Gln Leu Gln		
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530	535	540
Gln Thr Leu Leu Leu Ser Pro Glu Ala Gln Val Glu Phe Gly Val Gln		
545	550	555
Gln Glu Ile Ser Arg Leu Thr Asn Glu Asn Leu Asp Leu Lys Glu Leu		
565	570	575
Val Glu Lys Leu Glu Lys Asn Glu Arg Lys Leu Lys Lys Gln Leu Lys		
580	585	590
Ile Tyr Met Lys Lys Ala Gln Asp Leu Glu Ala Ala Gln Ala Leu Ala		
595	600	605
Gln Ser Glu Arg Lys Arg His Glu Leu Asn Arg Gln Val Thr Val Gln		
610	615	620
Arg Lys Glu Lys Asp Phe Gln Gly Met Leu Glu Tyr His Lys Glu Asp		
625	630	635
Glu Ala Leu Leu Ile Arg Asn Leu Val Thr Asp Leu Lys Pro Gln Met		
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Leu Ser Gly Thr Val Pro Cys Leu Pro Ala Tyr Ile Leu Tyr Met Cys		
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675	680	685
Leu Thr Ser Thr Ile Asn Gly Ile Lys Lys Val Leu Lys Lys His Asn		
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705	710	715
Leu His Cys Leu Lys Gln Tyr Ser Gly Asp Glu Gly Phe Met Thr Gln		
725	730	735
Asn Thr Ala Lys Gln Asn Glu His Cys Leu Lys Asn Phe Asp Leu Thr		
740	745	750
Glu Tyr Arg Gln Val Leu Ser Asp Leu Ser Ile Gln Ile Tyr Gln Gln		
755	760	765
Leu Ile Lys Ile Ala Glu Gly Val Leu Gln Pro Met Ile Val Ser Ala		
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<211> 1518
<212> DNA
<213> Homo sapiens
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2478

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 1080
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 1200
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<210> 3286

<211> 142

<212> PRT

<213> Homo sapiens

<400> 3286

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Lys	Asn	Leu	Arg	Tyr	Glu	Ala	Ala	Thr	Ser	Asp	Thr	Tyr	Arg	Lys	Gly
			20					25					30		
Lys	Asn	Asn	Asp	Asn	Thr	Arg	Pro	Ala	Pro	Pro	Pro	Lys	Ser	Cys	Cys
		35					40					45			
Cys	Glu	Leu	Arg	Leu	Gln	Lys	Arg	Thr	His	Thr	Val	Ala	Asp	Lys	Thr
	50					55					60				
Gln	Ala	Arg	Arg	Met	Phe	Glu	Ser	Gln	Ser	Ala	Leu	Ser	Leu	Val	Pro
65					70					75				80	
Val	Thr	Ser	Tyr	Val	Gln	Leu	Pro	Gly	Pro	Ile	Pro	Tyr	Ser	Asp	Cys
			85					90					95		
Arg	Leu	Arg	Thr	Glu	Asp	Ala	Pro	Leu	Leu	Ser	Leu	His	Phe	Asp	Leu
			100					105					110		
Leu	Phe	Pro	Leu	Lys	Thr	Arg	Arg	Pro	Ala	Phe	Pro	Lys	Thr	Ala	Trp

115	120	125
Pro Trp Leu Cys Thr Leu Phe Thr Thr Asp Gln Asn Ser Ile		
130	135	140

<210> 3287
 <211> 921
 <212> DNA
 <213> Homo sapiens

<400> 3287
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 120
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 180
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 300
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 360
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 420
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 480
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 660
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 780
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 921

<210> 3288
 <211> 148
 <212> PRT
 <213> Homo sapiens

<400> 3288
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 Leu Gly Arg Val Gly Ile Val Ser Pro Ala Pro Phe Pro Ala Pro Gln
 20 25 30
 Ser Cys Ser Phe Ser Phe Gly Leu Ser Lys Tyr Pro Gly Pro Pro Cys

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      35      40      45
Ile Pro Leu Pro Phe Ser Cys Gly Cys Gly Ala Ser Leu Asn Arg Ser
      50      55      60
Thr Phe Leu Phe Pro Ser Thr Arg Asp Arg Glu Ser Leu Lys Gly Ser
65      70      75      80
Gly Ala Pro Ser Ala His Leu Asp Gly Ala Gly Asp Ala Gln Arg Arg
      85      90      95
Phe Arg Ala Leu Tyr Phe Gln Leu Gln His Ser Gln Val Phe Thr Ala
      100      105      110
Gln Gly Asp Gly Ala Arg Val Thr Arg Asn Pro Gly Glu Gly Arg Ser
      115      120      125
Phe Pro Arg Arg Gly Ala Thr Ser Phe Pro Asp Trp Ala Tyr Ala Gly
      130      135      140
Gly Arg Gln Leu
145

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<210> 3289

<211> 554

<212> DNA

<213> Homo sapiens

<400> 3289

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120
cccagcctcc tagcccaata tcagggccgg aggcactgga gaacttccgg ctaaggcagg
180
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240
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300
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360
tccgagagga agggactgtg tccagggcgg gaccagggcc cttctgcact gggatcaatga
420
gccaagcaca tcacccacgc ccttggggag caggagccgg gccttgcagg gtgaggagct
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540
ataagctgca attg
554

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<210> 3290

<211> 129

<212> PRT

<213> Homo sapiens

<400> 3290

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Met Ile Pro Gly Cys Leu Pro Trp Ser Phe Ala Phe Pro Ser Ser Ser
  1      5      10      15
Pro Cys Lys Ala Arg Leu Leu Leu Pro Lys Gly Trp Gly Asp Val Leu
      20      25      30
Gly Ser Leu Thr Gln Cys Arg Arg Ala Trp Val Pro Pro Trp Thr Gln

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120
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180
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240
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300
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360
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480
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<210> 3292

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3292

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Val	Ala	Ala	Leu	Gly	Trp	Arg	Pro	Pro	Arg	Val	Pro	Ser	Pro	Ala	Pro
			20					25					30		
Trp	Ser	Ala	Thr	Pro	Gly	Pro	Pro	Trp	Ala	Pro	Ser	Pro	Ala	Thr	Pro
		35					40					45			
Ala	Val	Arg	Leu	Pro	Ala	Pro	Ser	Pro	Thr	Ile	Ala	Ala	Ser	Val	Pro
	50					55				60					
Pro	His	Trp	Leu	Phe	Thr	Trp	Leu	Ala	Val	Ser	Val	Ser	Gln	Pro	Gly
65				70					75					80	
Ser	Glu	Ser	Xaa	Arg	Arg	Pro	Leu	Pro	Pro	Pro	Gln	Leu	Pro	Pro	Pro
			85					90					95		
Thr	Pro	Pro	Ser	Leu	Pro										
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<210> 3293

<211> 2362

<212> DNA

<213> Homo sapiens

<400> 3293

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180
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720

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<210> 3294
<211> 353
<212> PRT
<213> Homo sapiens

<400> 3294
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20 25 30
Thr Ser Leu Pro Pro Gly Pro Pro Ala Gly Arg Arg His Leu Pro Leu
35 40 45
Ser Arg Arg Arg Arg Glu Met Ser Ser Asn Lys Glu Gln Arg Ser Ala
50 55 60
Val Phe Val Ile Leu Phe Ala Leu Ile Thr Ile Leu Ile Leu Tyr Ser
65 70 75 80
Ser Asn Ser Ala Asn Glu Val Phe His Tyr Gly Ser Leu Arg Gly Arg
85 90 95
Ser Arg Arg Pro Val Asn Leu Lys Lys Trp Ser Ile Thr Asp Gly Tyr
100 105 110
Val Pro Ile Leu Gly Asn Lys Thr Leu Pro Ser Arg Cys His Gln Cys
115 120 125
Val Ile Val Ser Ser Ser Ser His Leu Leu Gly Thr Lys Leu Gly Pro
130 135 140
Glu Ile Glu Arg Ala Glu Cys Thr Ile Arg Met Asn Asp Ala Pro Thr
145 150 155 160
Thr Gly Tyr Ser Ala Asp Val Gly Asn Lys Thr Thr Tyr Arg Val Val
165 170 175
Ala His Ser Ser Val Phe Arg Val Leu Arg Arg Pro Gln Glu Phe Val
180 185 190
Asn Arg Thr Pro Glu Thr Val Phe Ile Phe Trp Gly Pro Pro Ser Lys
195 200 205
Met Gln Lys Pro Gln Gly Ser Leu Val Arg Val Ile Gln Arg Ala Gly
210 215 220
Leu Val Phe Pro Asn Met Glu Ala Tyr Ala Val Ser Pro Gly Arg Met
225 230 235 240
Arg Gln Phe Asp Asp Leu Phe Arg Gly Glu Thr Gly Lys Asp Arg Glu
245 250 255
Lys Ser His Ser Trp Leu Ser Thr Gly Trp Phe Thr Met Val Ile Ala
260 265 270
Val Glu Leu Cys Asp His Val His Val Tyr Gly Met Val Pro Pro Asn
275 280 285
Tyr Cys Ser Gln Arg Pro Arg Leu Gln Arg Met Pro Tyr His Tyr Tyr
290 295 300
Glu Pro Lys Gly Pro Asp Glu Cys Val Thr Tyr Ile Gln Asn Glu His
305 310 315 320
Ser Arg Lys Gly Asn His His Arg Phe Ile Thr Glu Lys Arg Val Phe
325 330 335
Ser Ser Trp Ala Gln Leu Tyr Gly Ile Thr Phe Ser His Pro Ser Trp
340 345 350
Thr

<210> 3295
 <211> 690
 <212> DNA
 <213> Homo sapiens

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 690

<210> 3296
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 3296
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 20 25 30
 Pro Arg His Met Gly Pro Ala Leu Arg Ser Leu Gln Val Lys Lys Gly
 35 40 45
 Thr Glu His Ala Asp Pro Leu Pro Phe Pro Ser Val Ser Leu Ser Gly
 50 55 60
 Phe Thr Val Gly Thr Leu Ser Glu Thr Ser Thr Gly Gly Pro Ala Thr
 65 70 75 80
 Pro Thr Trp Lys Glu Cys Pro Ile Cys Lys Glu Arg Phe Pro Ala Glu
 85 90 95
 Ser Asp Lys Asp Ala Leu Glu Asp His Met Asp Gly His Phe Phe Phe
 100 105 110
 Ser Thr Gln Gly Pro Leu His Leu

115

120

<210> 3297
<211> 3176
<212> DNA
<213> Homo sapiens

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1020
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1140
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1380

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2520
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<213> Homo sapiens

<400> 3300

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Leu Glu Asp Val Ala Arg Thr Ala Asp His Ile Ser Arg Asp Ala Phe			
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Leu Lys Arg Pro Ile Ser Asn Lys Tyr Met Tyr Phe Met Lys Asn Arg			
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Lys Arg Lys Glu Asn Ser Thr Phe Phe Asp Lys Lys Lys Gln Gln Phe			
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Cys Trp His Val Lys Leu Gln Phe Pro Gln Ser Gln Ala Glu Tyr Ile			
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Glu Lys Arg Val Pro Asp Asp Lys Thr Ile Asn Glu Ile Leu Lys Pro			
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Tyr Ile Asp Pro Glu Lys Ser Asp Pro Val Ile Arg Gln Arg Leu Lys			
165	170	175	
Ala Tyr Ile Arg Ser Gln Thr Gly Val Gln Ile Leu Met Lys Ile Glu			
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<211> 2109

<212> DNA

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 <212> PRT
 <213> Homo sapiens

<400> 3302

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<211> 233

<212> PRT

<213> Homo sapiens

<400> 3304

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Val	Ala	Glu	Glu	Ala	Ala	Asp	Leu	Asp	Gly	Glu	Ile	Asp	Leu	Ser	Ala
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Cys	Tyr	Asp	Val	Thr	Glu	Tyr	Pro	Val	Gln	Arg	Asn	Tyr	Gly	Phe	Gln
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Ile	His	Thr	Lys	Glu	Gly	Glu	Phe	Thr	Leu	Ser	Ala	Met	Thr	Ser	Gly
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	130				135				140						
Thr	Ala	Pro	Asp	Val	Thr	Ser	Ser	Leu	Pro	Glu	Glu	Lys	Asn	Lys	Ser
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Ser	Cys	Ser	Phe	Glu	Thr	Cys	Pro	Arg	Ser	Thr	Glu	Lys	Gln	Glu	Ala
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Pro	Ile	Gln	Gln	Ala	Leu	Ala	Gln	Glu	Arg	Val	Gly	Gly	Val	Gly	Pro		
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<212> DNA

<213> Homo sapiens

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 <213> Homo sapiens

<400> 3307
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120
gaggtgggag ccctgccttg gccaggggtg ccgtgttgac gggtcttggg actgtgacat
180
tggaaggcga ggcaggtcac cagcactgtc ctctgcagga tgggctggga ttcatttggc
240
agcttctcag ggcctgtgtc cggctgggtg gtccctgtgc tgcccaaacc aggtgtccac
300
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352

<210> 3308

<211> 110

<212> PRT

<213> Homo sapiens

<400> 3308

Met	Gly	Leu	Pro	Arg	Ala	Leu	Ala	Leu	Pro	Ser	Gly	Gly	Arg	Ser	Gly
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Ser	Leu	His	Pro	Asp	Pro	Gly	Ala	Ser	Leu	Pro	Cys	Pro	Val	Leu	Ile
			20					25					30		
Pro	Arg	Trp	Glu	Pro	Cys	Leu	Gly	Gln	Gly	Gly	Arg	Val	Asp	Gly	Ser
		35					40					45			
Trp	Asp	Cys	Asp	Ile	Gly	Arg	Arg	Gly	Arg	Ser	Pro	Ala	Leu	Ser	Ser
	50					55				60					
Ala	Gly	Trp	Ala	Gly	Ile	His	Leu	Ala	Ala	Ser	Gln	Gly	Leu	Cys	Pro
65				70					75					80	
Ala	Gly	Trp	Ser	Leu	Cys	Cys	Pro	Asn	Gln	Val	Ser	Thr	Phe	Pro	Ala
			85					90						95	
Pro	Met	Arg	Arg	Glu	Gly	Gly	Arg	Trp	Trp	Leu	Gly	Trp	Arg		
			100					105					110		

<210> 3309

<211> 737

<212> DNA

<213> Homo sapiens

<400> 3309

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120
ccccaggacc ccaagtacca gggctctgcg gcacgtggcc gggagatccg gaaggagctt
180
gttcacctgt accccaggga ggcccagctt gaggagcagt tctacctgca ggcgctgaag
240
ctgcccacc agaccaccc agacgtgcc gtcggggatg agagccaggc tcgagtgtc
300
cacatggctg gagacaagcc agttttctcc ttccaacctc ggggccacct ggaaattggc
360
gagaaactcg acatcatccg tcagaagcgc ctgtcccacg tgtctggcca ccggctctat
420
tacctgcgcg gggctggagc cctcctgcag cacggcctgg tcaacttcac attcaacaag
480

cttctccgcc ggggcttcac ccccatgacg gtgccagacc ttctccgcgg agcagtgttt
 540
 gaaggctgtg ggatgacacc aaatgccaac ccattccaaa ttacaacat cgaccctgcc
 600
 cgcttcaaag atctcaacct tgctggaaca gcggaggtgg ggcttgcagg ctacttcatg
 660
 gaccacaccg tggccttcag ggacctgcca gtcaggatgg ttgctccag cacctgctac
 720
 cgggcagaga caaacac
 737

<210> 3310
 <211> 210
 <212> PRT
 <213> Homo sapiens

<400> 3310
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 Arg Gly Arg Glu Ile Arg Lys Glu Leu Val His Leu Tyr Pro Arg Glu
 20 25 30
 Ala Gln Leu Glu Glu Gln Phe Tyr Leu Gln Ala Leu Lys Leu Pro Asn
 35 40 45
 Gln Thr His Pro Asp Val Pro Val Gly Asp Glu Ser Gln Ala Arg Val
 50 55 60
 Leu His Met Val Gly Asp Lys Pro Val Phe Ser Phe Gln Pro Arg Gly
 65 70 75 80
 His Leu Glu Ile Gly Glu Lys Leu Asp Ile Ile Arg Gln Lys Arg Leu
 85 90 95
 Ser His Val Ser Gly His Arg Ser Tyr Tyr Leu Arg Gly Ala Gly Ala
 100 105 110
 Leu Leu Gln His Gly Leu Val Asn Phe Thr Phe Asn Lys Leu Leu Arg
 115 120 125
 Arg Gly Phe Thr Pro Met Thr Val Pro Asp Leu Leu Arg Gly Ala Val
 130 135 140
 Phe Glu Gly Cys Gly Met Thr Pro Asn Ala Asn Pro Ser Gln Ile Tyr
 145 150 155 160
 Asn Ile Asp Pro Ala Arg Phe Lys Asp Leu Asn Leu Ala Gly Thr Ala
 165 170 175
 Glu Val Gly Leu Ala Gly Tyr Phe Met Asp His Thr Val Ala Phe Arg
 180 185 190
 Asp Leu Pro Val Arg Met Val Cys Ser Ser Thr Cys Tyr Arg Ala Glu
 195 200 205
 Thr Asn
 210

<210> 3311
 <211> 486
 <212> DNA
 <213> Homo sapiens

<400> 3311
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 120
 aggaaagatc aaggagtaaa ccagaagaag aagaaaaaga ggacttcaaa gctgggaagg
 180
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 240
 taccagcgct atggagtcg gtcctacctg caccagtttt atgaggactg tacagcctca
 300
 atttgggagt atgaggatga tttccagatc caaagatcac ctaacagggtg gagctcagta
 360
 ttctggaagg ttggactcat ctcaggtaca gtttttgtga tcctcggatt gactgttctg
 420
 gcagtgggct ttcttgtgcc ccccaaaatc gaagcatttg gcgaagccga ttttgtgggtg
 480
 gtcgac
 486

<210> 3312
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 3312
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 20 25 30
 Phe Tyr Glu Asp Cys Thr Ala Ser Ile Trp Glu Tyr Glu Asp Asp Phe
 35 40 45
 Gln Ile Gln Arg Ser Pro Asn Arg Trp Ser Ser Val Phe Trp Lys Val
 50 55 60
 Gly Leu Ile Ser Gly Thr Val Phe Val Ile Leu Gly Leu Thr Val Leu
 65 70 75 80
 Ala Val Gly Phe Leu Val Pro Pro Lys Ile Glu Ala Phe Gly Glu Ala
 85 90 95
 Asp Phe Val Val Val Asp
 100

<210> 3313
 <211> 1791
 <212> DNA
 <213> Homo sapiens

<400> 3313
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 ccgaggaggg ggagatcgac tactcggccg aggaaggcga gaaccgcggt gaagcgacgc
 120
 cccggggcgg gtcgagttgg cggcggcggc ggccgantgc gttctcgtca gccggaaggg
 180
 ctgcgaagtc atcataaagt ttctgtttca cccgtcgtcc atgttcgagg actctgtgaa
 240
 tctgtggtgg aagcagacct cgtggaagcg ctggaaaaat ttgggacaat atgctatgtg
 300